

# IQRA IAS



# **CURRENT AFFAIRS JULY 2021**



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### **POLITY AND GOVERNANCE**

Paper II: This section is relevant to Polity and Governance Section of GS Paper II



#### 1.1 INTER -STATE RIVER WATER DISPUTE

Why in News: The Andhra Pradesh- Telangana dispute over sharing of Krishna river water has intensified, in the wake of projects taken up by both the States.

The project include Rayalaseema Lift Irrigation Scheme (RLIS) taken up by the Andhra Pradesh government, and the hydel power generation projects taken up by the Telangana government.

#### Historical Background about the dispute over Krishna River

- A dispute over the sharing of Krishna waters has been ongoing for many decades, beginning with the erstwhile Hyderabad and Mysore states, and later continuing between the successors Maharashtra, Karnataka and Andhra Pradesh.
- The first Krishna Water Disputes Tribunal (KWDT) was set up in 1969, under the Inter-State River Water Dispute Act, 1956. The report divided the 2060 TMC (thousand million cubic feet) of Krishna water at 75% dependability into three parts amongst Maharashtra, Karnataka and Andhra Pradesh.
- Afterward, as new grievances arose between the three states, the second KWDT was instituted in 2004. It delivered its report in 2010, which made allocations of the Krishna water at 65% dependability into three parts.
- Since the creation of a new state of Telangana in 2014, Andhra Pradesh has asked that Telangana be included as a separate party at the KWDT and that the allocation of Krishna waters be reworked among four states, instead of three.

Telangana and Andhra Pradesh share stretches of the Krishna and the Godavari and own their tributaries. Both states have proposed several new projects without getting clearance from the river boards, the Central Water Commission and the Apex Council, as mandated by the Andhra Pradesh Reorganisation Act, 2014.

- The APRA 2014 contains provisions for constitution of an Apex Council by Central Government for the supervision of the functioning of the GRMB and KRMB.
- GRMB and KRMB are autonomous bodies set up after the bifurcation of the state for administration, regulation, maintenance and operation of projects in Godavari and Krishna rivers basins to ensure judicious water use in Andhra Pradesh (A.P) and Telangana respectively.
- In 2014, the two states agreed to split the water in 66:34 ratio as per the allocation made on an ad hoc or temporary basis by the Krishna Water Disputes Tribunal-1 (KWDT).



- The Andhra Pradesh Reorganisation Act, 2014 mandates for the constitution of an Apex Council by the Central Government for the supervision of the functioning of the Godavari River Management Board and Krishna River Management Board.
  - The Apex Council comprises the Union Water Resources Minister and the Chief Ministers of Telangana and Andhra Pradesh.
- The Andhra Pradesh government's proposal to increase the utilisation of the Krishna water from a section of the river above the Srisailam Reservoir led to the Telangana government filing a complaint against Andhra Pradesh.
  - The Srisailam reservoir is constructed across the Krishna River in Andhra Pradesh. It is located in the Nallamala hills.
- The Andhra Pradesh government retaliated with its own complaints saying that Palamuru-Rangareddy, Dindi Lift Irrigation Schemes on the Krishna river and Kaleshwaram, Tupakulagudem schemes and a few barrages proposed across the Godavari are all new projects.

#### **Constitutional Provisions on Inter-State River Water Disputes**

- Article 262 of the Constitution provides for the adjudication of inter-state water disputes.
- Under this, Parliament may by law provide for the adjudication of any dispute or complaint
  with respect to the use, distribution and control of waters of any inter-state river and river
  valley.
- Parliament may also provide that neither the Supreme Court nor any other court is to exercise jurisdiction in respect of any such dispute or complaint.
- The Parliament has enacted the two laws, the River Boards Act (1956) and the Inter-State Water Disputes Act (1956).
- The River Boards Act provides for the establishment of river boards by the Central government for the regulation and development of inter-state river and river valleys.
- A River Board is established on the request of state governments concerned to advise them.
- The Inter-State Water Disputes Act empowers the Central government to set up an ad hoc tribunal for the adjudication of a dispute between two or more states in relation to the waters of an inter-state river or river valley.
- The decision of the tribunal is final and binding on the parties to the dispute. Neither the Supreme Court nor any other court is to have jurisdiction in respect of any water dispute which may be referred to such a tribunal under this Act.

#### **Godavari River**



- Godavari River rises from Trimbakeshwar near Nasik in Maharashtra and flows for a length
  of about 1465 km before outfalling into the Bay of Bengal.
- The Godavari basin extends over states of Maharashtra, Telangana, Andhra Pradesh, Chhattisgarh and Odisha in addition to smaller parts in Madhya Pradesh, Karnataka and Union territory of Puducherry.
- Pravara, Purna, Manjra, Penganga, Wardha, Wainganga, Pranhita (combined flow of Wainganga, Penganga, Wardha), Indravati, Maner and the Sabri

#### **Krishna River**

- It originates near Mahabaleshwar (Satara) in Maharashtra. It is the second biggest river in peninsular India after the Godavari River.
- It runs from four states Maharashtra (303 km), North Karnataka (480 km) and the rest of its 1300 km journey in Telangana and Andhra Pradesh before it empties into the Bay of Bengal.
- Tungabhadra, Mallaprabha, Koyna, Bhima, Ghataprabha, Yerla, Warna, Dindi, Musi and Dudhganga.

#### How is the water split between A.P. and Telangana currently?

- After Telangana was carved out of Andhra Pradesh, the two states agreed to split the water share 66:34 on an ad hoc basis until the KWDT decides the final allocation.
- Of the 811 TMC of water allocated to the united-state, Andhra Pradesh and Telangana at present get 512 TMC and 299 TMC respectively.

#### **Andhra Pradesh government's argument:**

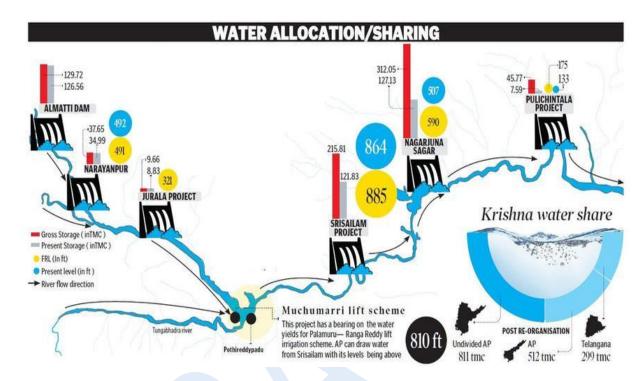
- Andhra Pradesh alleges that Telangana has been drawing Krishna water from four projects
   Jurala, Srisailam, Nagarjuna Sagar, and Pulichintala for hydropower generation without approvals from the Krishna River Management Board (KRMB).
- As per the A.P. government, the water that is used for these power generation projects is being wasted by releasing it into the Bay of Bengal, even as farmers in the Krishna delta are yet to begin sowing of the kharif crop.

#### Telangana government's argument

- Telangana says it would continue with the hydropower generation to meet its requirements of power.
- At the same time, it has taken strong exception to the irrigation projects of the A.P. government, especially the Rayalaseema Lift Irrigation Project (RLIP), which it claims is illegal.



• As part of the RLIP, the A.P. government wants to widen the canal on its side for improved flow of river water.



#### Issues associated with Inter State River disputes

**Delays in dispute resolution:** Adjudication by tribunals involves long-drawn adversarial litigations causing chronic delays.

**Complex procedure:** Because of procedural complexities and incomplete nature of the system that involves multiple stakeholders across governments and agencies, there are too many options and discretion at many stages in the institutional framework and guidelines process which hampers the efficient functioning of the tribunal itself.

**Problem of non-compliance:** Due to India's federal nature of polity and its colonial legacy, there is problem in ensuring compliance wherein state governments have sometimes rejected tribunal awards.

**Institutional vacuum:** The law entrusts the Central government with the responsibility of framing institutions for implementing tribunal awards. There are no proven institutional models for interstate coordination and implementing tribunal awards.

Steps taken by government to minimize the Inter- State River disputes



#### Parliament has enacted two laws:

- River Boards Act, 1956, provides for the establishment of River Boards, for the regulation and development of inter-State rivers and river valleys.
- Inter-State River Water Disputes (Amendment) Bill, 2019 to streamline the adjudication of inter-state river water disputes and make the present institutional architecture robust.
- River Basin Management Bill, 2019, proposes to establish a River Basin Authority for regulation and development of inter-state rivers and river basins.
- National Water Informatics Centre (NWIC) has been established under National Hydrology Project to maintain a comprehensive water resources data and collaborate with leading research institutes to provide technical support to central and state organizations dealing with water emergency response of hydrological extremes.
- A web-based Water Resources Information System (India WRIS) has been set up and all unclassified data of Central Water Commission and Central Ground Water Board have been uploaded on the website.

### 1.2 COUNCIL OF MINISTERS

Why in News: Prime Minister Narendra Modi effected sweeping changes to his government, bringing in many new leaders into the government, while dropping some. 36 new ministers have taken oath; seven others were elevated (from MoS to Cabinet Minister). Meanwhile, 7 cabinet and 5 junior ministers were dropped.

#### **Union Council of Ministers**

Article 74 of the Constitution of India provides for the real executive: The Union Council of Ministers with the Prime Minister as its head.

Organisation of the Council of Ministers: Article 75 of the Indian Constitution lays down following basic rules regarding the organisation of the Union Council of Ministers:

- The Prime Minister is appointed by the President and all other Ministers are appointed by the President upon the advice of the Prime Minister.
- The Ministers hold office during the pleasure of the President.
- The Council of Ministers is collectively responsible to the House of the People (Lok Sabha)



### MODI 2.0 REBOOT

#### EXITS 6 Cabinet ministers, 1 MoS (ind ) & 5 MoS out

Harsh Vardhan | Ravi Shankar Prasad | D V Sadananda Gowda | Thaawarchand Gehlot | Ramesh Pokhriyal Nishank | Prakash Javadekar | Santosh Kumar Gangwar | Babul Supriyo | Dhotre Sanjay Shamrao | Rattan Lal Kataria | Pratap Chandra Sarangi | Debasree Chaudhuri

#### PROMOTIONS | 7 MoS elevated to Cabinet rank

Kiren Rijiju (Law & Justice) Good work as junior sports minister, seen as effective

Raj Kumar Singh (Power; New & Renewable Energy) Handled power portfolio well. Also did well on renewable energy, a key project for govt

Hardeep Singh Puri (Petroleum & Natural Gas: Housing & Urban Affairs)

Viewed as efficient. Steered key projects (central vista) & ministry (civil aviation)

Mansukh Mandaviya

(Health and Family Welfare; Chemicals and Fertilisers) Seen as a young go-getter

Parshottam Rupala (Fisheries, Animal

Husbandry) Former party chief in Gujarat, which is heading for polls next yr

G Kishan Reddy (Culture; Tourism; Development of NE Region) Impressed in speaking on issues such as CAA, was part of MHA Covid management team. Seen as a good future prospect in Telangana

Anurag Singh Thakur (1&8: Youth Affairs & Sports) Rewarded for work as junior finance minister, clear communication. Seen as having a bright future



#### NEW MINISTERS IN CABINET

Narayan Tatu Rane (Rajya Sabha, Maharashtra) Micro, Small & Medium Enterprises

Sarbananda Sonowal (Assam) Ports, Shipping And Waterways; Ayush

Virendra Kumar (LS, MP) Social Justice & Empowerment

Jyotiraditya Scindia (RS, MP) Civil Aviation, once held by his father

Ramchandra Prasad Singh (RS, Bihar) Steel

Ashwini Vaishnaw (RS, Odisha) Railways: Communications: Electronics and IT

Pashupati Kumar Paras (LS, Bihar) Food Processing Industries

Bhupender Yadav (RS, Raj) Environment, Forest and Climate Change; Labour & Employment

#### 41 PROFESSIONALS IN TEAM NOW

- > Lawyers 13
- > Doctors 6
- > Engineers 5
- > Civil Servants 7
- > PhDs 7
- > MBAs 3

#### **INDUCTEES FROM ALLIES**

Ram Chandra Pratap Singh JD(U)

Pashupati Kumar Paras LIP Anupriya Patel Apna Dal

I congratulate all colleagues who have taken oath today and wish them the very best... We will continue working to fulfil aspirations of the people and build a strong and prosperous

- PM Narendra Modi

#### **Process of Formation of the Union Council of Ministers**

Appointment of the Prime Minister: After the election of each new Lok Sabha, the President appoints the leader of the majority in Lok Sabha, as the Prime Minister.

**Appointment of the Council of Ministers:** After his appointment, the Prime Minister prepares the list of the persons whom he recommends for appointment as ministers. The President appoints all other Ministers upon his recommendation. The President always accepts the advice of the Prime Minister.

**Distribution of portfolios:** Further, acting upon the advice of the Prime Minister, the President distributes portfolios among the Ministers. Hence, the Prime Minister is the sole judge to decide who shall be a Minister, which portfolio a minister will hold and who will be a Cabinet Minister or a Minister of State or a Deputy Minister.



Can a non-member be appointed as a Minister: Normally only a member of either House of the Parliament is appointed as a Minister. However, the Prime Minister can also appoint a non-member as a Minister, but such a Minister has to get the membership of either house (through an election or a nomination), within six months of his appointment.

**Size and Composition of the Council of Ministers:** To begin with there was no formal rule regarding the size of the Council of Ministers. The decision in this respect used to rest with the Prime Minister. But now the number of Ministers cannot be more than 15% (91st Constitutional Amendment Act, 2003) of the total membership of the Lok Sabha.

#### **Categories of Ministers**

- Cabinet Ministers: Their number is between 15-20. They are the most important Ministers, holding key portfolios. They constitute the Cabinet the powerful policymaking and decision-making part of the Council of Ministers.
- Ministers of State: They constitute the second category of Ministers. They are not the
  members of the Cabinet. A Minister of state either holds an independent charge of a small
  department or is attached to a Cabinet Minister. For example, the Ministries like Civil
  Aviation, Information and Broadcasting, Labour Welfare, etc, are headed by a Minister of
  State.
- **Deputy Ministers:** They help Ministers and are either attached to the Cabinet Ministers or the Ministers of State. No Deputy Minister holds an independent charge of any department.
- Term of Office: Theoretically, ministers hold office during the pleasure of the President. It
  really means so long as they continue to enjoy the confidence of the majority in the Lok
  Sabha. For example, if the Lok Sabha rejects a bill supported by the Council of Ministers, it is
  taken to be a vote of no confidence against the government and the entire Council of
  Ministers resigns.
- The Prime Minister can, at any time, demand a resignation from any Minister and the latter has to comply. If not, the Prime Minister can recommend to the President the dismissal of any Minister and the President always acts upon his advice.
- The resignation of the Prime Minister means the resignation of the entire Council of Ministers. Thus, the tenure of the Ministry or a Minister is not fixed. The maximum term for which a Minister can remain in office is 5 years for one full term of the Lok Sabha.

#### **Position of the Union Council of Ministers**

• Theoretically, the Council of Ministers and Prime Minister are to aid and advise the President in the exercise of his powers. However, in actual practice, almost all powers of the President are exercised through the Prime Minister and his Council of Ministers.



• The President is bound by the advice of the Prime Minister and his Council of Ministers. Hence, the Council of Ministers hold a strong and central position in the Indian political system. Within the Council of Ministers, the Cabinet is the most powerful body.

#### 1.3 OTHER BACKWARD CASTES (OBC)

Why in News: Justice Rohini Commission recently highlighted the need to clear the confusion over Central and State lists of Other Backward Castes (OBCs), before a report on subcategorisation of OBCs can be made.

#### Other Backward Castes (OBCs)

- Other Backward Class (OBC) is a collective term used by the Indian government to classify castes which are educationally or socially disadvantaged.
- It is one of several official classifications of the population of India, like General Class, Scheduled Castes and Scheduled Tribes (SCs and STs).
- In the Indian Constitution, OBCs are described as socially and educationally backward classes (SEBC).

#### **Justice Rohini Commission**

- Headed by Justice (Retd.) G Rohini, the commission was constituted under Article 340 of the Constitution with the approval of the President on 2nd October 2017.
- Article 340 deals with the appointment of a commission to investigate the conditions of backward classes.
- It had been constituted to complete the task of sub-categorising 5000-odd castes in the central OBC list so as to ensure more equitable distribution of opportunities in central government jobs and educational institutions.
- In 2015, the National Commission for Backward Classes (NCBC) had recommended that OBCs should be categorised into extremely backward classes, more backward classes and backward classes.
- The benefits of the reservation in OBCs are being cornered mostly by the dominant OBC groups over the years so there is a need to recognise sub-quotas for the extremely backward classes within the OBCs.
- NCBC has the authority to examine complaints and welfare measures regarding socially and educationally backward classes.

#### Mandate



- Examine the uneven distribution of reservation benefits among different castes in the central OBC list. For example, certain castes were left out of the ambit because of a difference in spelling in a State.
- Work out mechanism and parameters for sub-categorisation of OBCs, to identify castes, sub-castes and communities and classify them into sub-categories.
- Submit a comprehensive report after consultation with various stakeholders so that Census 2021 can include comprehensive data on OBCs.

#### **Efforts towards sub-categorisation of OBCs**

#### **Need for sub-categorisation of OBCs**

- OBCs are granted 27 per cent reservation in jobs and education under the central government. However, there is a perception that only a few rich communities have taken the benefit of these 27 per cent reservations. The Rohini commission highlighted that from about 2,633 central list OBCs, about 1900 castes have not proportionately benefitted.
- The argument for creating categories within OBCs for reservation is that it would ensure "equitable distribution" of benefits of reservation among all OBC communities. Research suggests that the Mandal Commission recommendations helped the economically better positioned OBCs more than the most backward castes.

#### **102nd Constitutional Amendment**

- The 102nd Constitutional Amendment made National Commission for Backward Classes (NCBC) a constitutional body. It also introduced Articles 338B and 342A in the Constitution.
- Article 338B deals with the structure, duties and powers of the NCBC.
- Article 342A, empowers the President to specify socially and Educationally Backward Classes (SEBC) in various States and Union Territories, after consultation with the Governor.
- However, Parliament has to enact a law to include or exclude a particular class in the Central List of socially and educationally backward classes.

#### SC's decision on State's power to identify SEBCs and 102nd Amendment

- The Supreme Court recently gave a judgement in May, 2021, in which it upheld the constitutional validity of the 102nd amendment.
- It also declared that only the President can take decisions on declaring SEBCs for granting reservation.



- The judgement also concluded that the 102nd amendment has taken away the power of states to decide on designating SEBCs in their states and now only the President can take a decision.
- In the task of identification of SEBCs, the President will be guided by the NCBC set up under Article 338B.
- The States can only make "suggestions" and the final exercise of including castes and communities should be done by the President alone.

Currently, there are two lists of OBCs — Central and State. The Central list of OBCs is identified by the Union government dealing with the quotas in the central jobs. The State lists of OBCs are identified by respective State governments dealing with reservations in their states.

However, in its May judgement, the SC also mentioned about a future "single list" of OBCs. As per the SC, this single list should be issued by the President on the recommendations of the National Commission for Backward Classes.

However, the ruling on a single list of OBCs, is not entirely clear and has been interpreted by experts as a merger of the central list and state lists. The SC judgement may also reduce the power of States to identify castes for reservations in state jobs and related purposes.

#### **News Update**

- The Rohini Commission on sub-categorisation of OBCs has stopped its work due to the confusion resulting from the Supreme Court judgement.
- The Commission highlighted the need to clear the confusion over Central and State lists of Other Backward Castes (OBCs), before a report on sub-categorisation of OBCs can be made.
- The government is planning to amend the 102nd Constitutional amendment to ensure that states retain the right to identify the castes for state lists.
- The government may also have to design the proposed amendment in a way that the concerns raised by the Rohini Commission is also addressed. Alternatively, the Union government may also seek a clarification from the SC on single list of OBCs.

#### **National Commission for Backward Classes**

- In 1992, in the Indira Sawhney case the Supreme Court directed the government to constitute a permanent body to assist in issues related to inclusion of OBCs in the Central List.
- Following the SC judgement, the Parliament passed The National Commission for Backward Classes Act, 1993 to constitute the National Commission for Backward Classes. This gave NCBC a statutory status.



 Later in 2018, the NCBC was made a constitutional body through the 102nd Constitutional Amendment Act.

#### **Powers and Functions of NCBC**

- Investigate and monitor all matters relating to the safeguards provided for SEBCs and to evaluate the working of such safeguards.
- Inquire into specific complaints with respect to the deprivation of rights and safeguards of SEBCs. During the investigation, the Commission has the powers of a civil court.
- Participate and advise on the socio-economic development of SEBCs and evaluate the progress of their development under the Union and any State.
- Present reports to the President regarding the working of the safeguards. The report should include measures for the protection, welfare and socio-economic development of the socially and educationally backward classes.

#### 1.4 97th AMENDEMENT ACT 2011

Why in News: The Supreme Court (SC) of India has struck down certain provisions of the Constitution (97th Amendment) Act, 2011, which deals with the working of cooperative societies working within a state.

#### **Cooperatives in India**

- Cooperatives are organizations formed at the grassroots level by people to harness the power of collective bargaining towards a common goal.
- The main aim of Cooperative societies is to provide tangible benefit to all people who face similar problems.
- The Cooperative societies play an important role in the socio-economic development of the country.

#### **Cooperatives in India**

The cooperative movement in India plays a crucial role in the agricultural sector, banking and housing. For example:

In agriculture, cooperative dairies, sugar mills, spinning mills etc. are formed with the pooled resources of farmers who wish to process their produce. The country has 1, 94,195 cooperative dairy societies and 330 cooperative sugar mill operations, which account for 35% of the sugar produced in the country.



In banking and finance, cooperative institutions are spread across rural and urban areas. For example, village-level primary agricultural credit societies (PACSs) formed by farmer associations are the best example of grassroots-level credit flow.

There are also cooperative marketing societies in rural areas and cooperative housing societies in urban areas.

#### **Constitutional Provisions**

- Part IXB of the Constitution deals with the Cooperative Societies.
- The 97th Constitution Amendment Act, 2011 inserted Part IXB in the Constitution of India.
- It deals with the incorporation of co-operative societies, boards, office bearers and other provisions related to cooperatives.

#### Laws govern cooperative societies in India

#### **Single-state Cooperatives**

- The incorporation, regulation and winding up of co-operative societies (other than those operating in more than one State) is a State subject and is governed by the State laws on co-operative societies.
- A majority of the cooperative societies in India are governed by laws in their respective states (State Cooperative Societies Acts).
- **Co-operative societies (single state):** The Legislature of a State may, by law, make provisions with respect to the incorporation, regulation and winding up of co-operative societies.
- A "co-operative society" in a state means a society registered or deemed to be registered under any law relating to co-operative societies in the state.
- The State Government and the Registrar of Co-operative Societies appointed by the State are the main regulatory authorities for the co-operative societies.

#### **Multistate Cooperatives**

In the case of co-operatives with objects not confined to one State, their incorporation, regulation and winding up fall in the central domain.

**Multistate Cooperative Societies Act, 2002:** Under Art 243ZR in Part IXB of the Constitution, the Parliament has the power to enact laws related to the multi-State co-operative societies. Consequently, the Centre passed the Multi-State Cooperative Societies Act in 2002 to enable for registration of societies with operations in more than one state.



These are mostly banks, dairies and sugar mill whose area of operation spreads across states. The Central Registrar of Societies is their controlling authority, but on the ground the State Registrar takes actions on his behalf.

#### **97th Constitutional Amendment regarding Cooperative Societies**

- 97th Constitutional Amendment- Cooperative Societies: The Parliament, in order to address the problems with cooperatives and enable them further, introduced the 97th Amendment to the Constitution in 2011.
- It enshrines within Article 19(1) (c) the right to form cooperative societies, by inserting (after the words 'or unions') the words 'or Co-operative Societies'.
- It also inserted Article 43B in Part IV of the Constitution as "The State Shall endeavor to promote Voluntary formation, autonomous functioning, democratic Control and professional management of the Co-operative societies".
- It inserted Part IXB (Articles 243ZH to 243ZT) into the Constitution, dictating the terms for running co-operative societies.

#### Significance of the 97th Constitutional Amendment

- **Injecting professionalism and autonomy:** Lack of accountability and autonomy has led to poor services and low productivity of the cooperative societies. Thus, the amendment aims to inject professionalism into the functioning of the societies.
- Running them on democratic principles: It was observed that in many societies' elections are not held in regular intervals. The amendment with mandatory provisions for elections will help to run Co-operatives on well-established democratic principles.

#### **News Update**

- The Supreme Court (SC) of India has struck down certain provisions of Part IXB of the 97th constitutional amendment.
- Part IXB (Articles 243ZH to 243ZT), dealing with the definition, in-cooperation, boards and elections of the co-operative societies, was inserted into the Constitution by the 97th amendment. It also has provisions related to "Multi-State co-operative societies".
- The court struck it down on the ground of procedural infirmity as it was not ratified by states as per Article 368 (2), though the legislative head 'cooperative societies' is in the State List under 7th Schedule.
- The subject matter (cooperative societies) fell in the state list and belongs wholly and exclusively to the State legislatures to legislate upon.



- Therefore, any change would require the ratification by at least one-half of the state legislatures as per Article 368(2) of the Constitution.
- However, the court, by a majority judgement of 2:1, did not strike down entire Part IXB. It, however, declared that Part IXB of the Constitution is operative only insofar as it concerns multi-state cooperative societies both within the states and in UTs.

#### **Doctrine of Severability**

- The court applied the 'Doctrine of Severability' in striking down some provisions of Part IXB
  while upholding some other parts (like on multi-state cooperatives in this case).
- According to the doctrine of severability when some of the provisions of a statute becomes unconstitutional, only those provision of the law in question shall be treated by the courts as void, and not the whole statute

### 1.5 JUVANILE JUSTICE AMENDMENT BILL 2021

Why in News: Recently, the Juvenile Justice (Care and Protection of Children) Amendment Bill, 2021, was passed in the Rajya Sabha. Parliament passed the Juvenile Justice (Care and Protection of Children) Amendment Bill, which seeks to increase the role of district magistrates and additional district magistrates in matters concerning child care and adoption.

The bill seeks to amend the Juvenile Justice Act, 2015.

#### Background

- The National Commission for Protection of Child Rights (NCPCR) audit of Child Care Institutions (CCIs) in 2020, 90% of which are run by NGOs, found that 39% CCIs were not registered, even after the 2015 amendment was brought in.
- It also found that less than 20% CCIs, especially for girls, had not been set up in some states, 26% child welfare officers were not there.
- Moreover, three-fifths have no toilets, one-tenth have no drinking water and 15% of homes don't have provisions for separate beds or diet plans.
- Rehabilitation of children is not a priority for childcare homes and children are reportedly kept in such institutions to get funds.

#### **Key Amendments Proposed by the Bill**

• **Serious Offences:** Serious offences will also include offences for which maximum punishment is imprisonment of more than seven years, and minimum punishment is not prescribed or is of less than seven years.



Serious offences are those for which the punishment under the Indian Penal Code or any other law for the time being is imprisonment between three and seven years.

- Non-cognizable Offences: The present Act provides that an offence which is punishable
  with imprisonment between three to seven years to be cognizable (where arrest is allowed
  without warrant) and non-bailable. The Bill amends this to provide that such offences will
  be non-cognizable.
- Adoption: Presently, the adoption order issued by the court establishes that the child belongs to the adoptive parents. The Bill provides that instead of the court, the District Magistrate (including Additional District Magistrate) will issue such adoption orders.
- **Appeals:** The Bill provides that any person aggrieved by an adoption order passed by the District Magistrate may file an appeal before the Divisional Commissioner, within 30 days from the date of passage of such order.
- Additional Functions of the District Magistrate: These include: supervising the District Child
  Protection Unit, and conducting a quarterly review of the functioning of the Child Welfare
  Committee.
- **Designated Court:** The Bill proposes that all offences under the earlier Act be tried in children's court.
- Child Welfare Committees (CWCs): It provides that a person will not eligible to be a member of the CWC if he/she
  - has any record of violation of human rights or child rights,
  - has been convicted of an offence involving moral turpitude,
  - has been removed or dismissed from service of the central government, or any state government, or a government undertaking,
  - is part of the management of a child care institution in a district.

**Removal of Members:** The appointment of any member of the committee shall be terminated by the state government after an inquiry if they fail to attend the proceedings of the CWCs consecutively for three months without any valid reason or if they fail to attend less than three-fourths of the sittings in a year.

#### Juvenile Justice (Care and Protection of Children), Act, 2015

- Parliament introduced and passed the Juvenile Justice (Care and Protection of Children) Act in 2015 to replace the Juvenile Delinquency Law and the Juvenile Justice (Care and Protection of Children Act) 2000.
- The Act offered provisions to allow trials of juveniles in the age group of 16-18 years as an adult who were found to be in conflict with the law, especially heinous crimes.



- The Act also offered provisions regarding adoption. The Act replaced the Hindu Adoptions and Maintenance Act (1956) and Guardians of the ward Act (1890) with more universally accessible adoption law.
- The Act enabled smooth functioning of adoption procedures for orphans, surrendered, and abandoned children while making the Central Adoption Resource Authority (CARA) the statutory body for adoption-related matters.

#### **CARA**

- Central Adoption Resource Authority (CARA) was granted the status of a statutory body to enable it to perform its function more effectively.
- CARA functions as the nodal body for adoption of Indian children and is mandated to monitor and regulate in-country and inter-country adoptions.
- It primarily deals with adoption of orphan, abandoned and surrendered children through its associated/ recognised adoption agencies.





### INTERNATIONAL RELATIONS

Paper II (GS): All the Articles of this section are relevant to the following topics:

- India and its Neighbourhood Relations
- Bilateral, Regional and Global Groupings and Agreements involving India and / or affecting India's Interests
- Prelims Oriented Questions and Places in News for Maps/ Matching



#### 2.1 OPEC and OPEC+ OUTPUT PACT

Why in News: The OPEC+ group of countries have agreed to gradually withdraw Covid-related production cuts by September 2022, leading to crude oil prices falling to about \$72 per barrel.

#### **OPEC**

- The Organization of the Petroleum Exporting Countries is an intergovernmental organization of 13 nations (as of February 2021), founded in 1960 in Baghdad by the first five members (Iran, Iraq, Kuwait, Saudi Arabia, and Venezuela), and headquartered since 1965 in Vienna, Austria.
- The current OPEC members are Algeria, Angola, Equatorial Guinea, Gabon, Iran, Iraq, Kuwait, Libya, Nigeria, the Republic of the Congo, Saudi Arabia (the de facto leader), the United Arab Emirates and Venezuela. Ecuador, Indonesia and Qatar are former members.
- Its mission is to ensure the stabilization of oil markets, in order to secure an efficient, economic and regular supply of petroleum to consumers, a steady income to producers, and a fair return on capital for those investing in the petroleum industry.
- The organization is also a significant provider of information about the international oil market.
- The formation of OPEC marked a turning point toward national sovereignty over natural resources, and OPEC decisions have come to play a prominent role in the global oil market and international relations.

#### **OPEC+**

- OPEC+ is an agreement between OPEC and 10 Non-OPEC nations (notable among them Russia, Mexico and Kazakhstan) in order to protect oil prices from a global slowdown.
- OPEC's 13 members control 35 percent of global oil supplies and 82 percent of proven reserves. With the addition of the 10 Non-OPEC nations, those shares had increased to 55 percent and 90 percent respectively.
- The agreement signed in January 2017 in Vienna, called for the members of the deal to cut production by 1.8 million barrels/day of crude oil from global supplies from the beginning of 2017.
- The principle aim was to help ease the oversupply situation back then and importantly reduce the huge stocks that had been delaying the much-needed rebalancing of the oil market.



#### **Background: OPEC+ pact to cut oil production to boost prices**

- An agreement signed in January 2017 in Vienna called for the OPEC+ members of the deal to cut production by 1.8 million barrels/day of crude oil from global supplies from the beginning of 2017.
- It lasted till March 2020, when they couldn't find an agreement for production cuts to raise oil prices amidst low oil demand during the pandemic. Consequently, oil prices hit rock bottom.
- The price of Brent crude hit an 18-year low of under \$20 per barrel in April 2020 as demand and economic activity crashed around the world as countries dealt with the Covid-19 pandemic.
- In April 2020, OPEC+ along with another major oil producer United States agreed on a deal to curb global oil supply by 20 per cent, to give an upward push to oil prices as the demand for oil plummeted due to Covid crisis.
- OPEC+ had agreed to cut output by almost 10 million barrels per day (bpd) from May 2020, with plans to phase out the curbs by the end of April 2022.
- At the beginning of July 2021, production cuts from OPEC+ still stood at 5.8 million bpd, despite the crude oil prices recovering to well above the pre-Covid-19 levels.
- This has led to consistently high oil prices, now at 2-1/2 year highs at around \$75 a barrel.
- The rise in oil prices has been contributing to global inflation, slowing the economic recovery from the novel corona virus crisis.

#### **News Update**

- After months of negotiations, the OPEC+ countries, led by Russia, have finally agreed to gradually withdraw Covid-related production cuts by September 2022.
- OPEC+ has decided to increase overall production by 400,000 bpd (barrels per day) every month, till the remaining portion of the group's 10 million barrel per day production cut, announced in April 2020, is completely phased out.
- The deal led to crude oil prices falling to about \$72 per barrel.

#### The Output Pact & Fluctuating Oil Price

The OPEC+ group of countries had, in April 2020, entered into a two-year agreement (Output Pact), which entailed steep cuts in crude production to deal with a sharp fall in the price of oil as a result of the Covid-19 pandemic. The price of Brent crude hit an 18-year low of under



USD 20 per barrel in April 2020 as economic activity around the world crashed as countries dealt with the pandemic.

In November 2020, the prices started rising and in July 2021, they were USD 76.5 per barrel mainly due to the steady rollout of vaccination programs around the world.

OPEC+, however, maintained lower levels of production despite crude oil prices reaching pre-Covid levels, with Saudi Arabia, notably, announcing a further cut in production of 1 million barrels per day for the February-to-April period, which helped boost rising prices even further. The OPEC+ group ran into sharp criticism from developing economies, including India, for deliberately maintaining low supply levels to raise prices.

In April, OPEC+ agreed to gradually increase crude production, including a phased end to Saudi Arabia's 1 million barrel per day cut in production by July.

#### **UAE's Objection**

- UAE agreed that there was a need to increase crude oil production from August 2021, but did not agree to a condition by the OPEC Joint Ministerial Monitoring Committee (JMMC) that the two-year production agreement be extended by six months.
- The UAE's key objection to the existing agreement is the reference output used to calculate the total production apportioned to each oil-exporting country.
- The baseline production level reference used in the current agreement was not reflective of the UAE's production capacity and, therefore, led to the UAE being apportioned a lower share of total production of crude oil. UAE would be open to extending the agreement if baseline production levels were reviewed to be fair to all parties.

#### Impact of OPEC+ conflict on India

- If the UAE and other OPEC+ nations do not reach an agreement to increase production in August, expected relief in the form of lower crude oil prices could be delayed.
- India is currently facing record-high prices of petrol and diesel. High crude prices have led
  to Indian oil marketing companies hiking the price of petrol by about 19.3% and that of
  diesel by about 21% since the beginning of 2021.
- The high price of crude oil was slowing down the economic recovery of developing economies post the pandemic.
- The high prices might also increase the Current Account Deficit and put inflationary pressure on the Indian economy.



#### 2.2 CONFRENCE ON CENTRAL AND SOUTH ASIA

Why in News: India's External Affairs Minister (EAM) recently addressed the Conference on 'Central and South Asia: Connectivity'.

The Conference was hosted by Uzbekistan, and was attended by leaders from Pakistan, Afghanistan and 35 other countries. The Conference focused on practical ways to enhance connectivity with a larger aim of deepening trade, investment and people-to-people ties in the region.

#### Highlights of the address

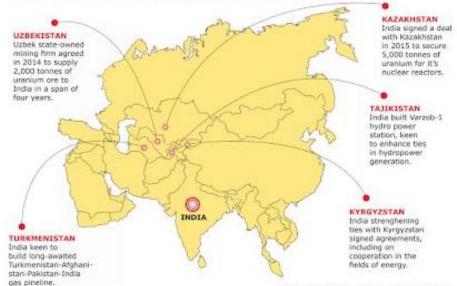
- The EAM pointed that strong connectivity within and between Central and South Asia is rooted in history and India's focus in the last few years has been to rebuild these links.
- He said that, to expand connectivity between Central and South Asia, there was a need to address not just physical infrastructure but all the associated aspects.
- Maintaining ecological and environmental standards, and skill and technology transfers, are equally important.
- Tourism and societal contacts can create a strong enabling environment. However, building connectivity is an act of trust and must, conform to international law, sovereignty and territorial integrity.

#### Economic Growth and Connectivity

**Economic growth is** universally driven by 3Cs: connectivity, commerce and contacts. All three need to come together to ensure regional cooperation and prosperity.

#### INDIA'S FOOTPRINT IN THE CENTRAL ASIA

India has a special focus on the importance of energy diplomacy, specifically with reference to building relationship with the energy-rich region of the Central Asia.





- Connectivity efforts must be based on economic viability and financial responsibility. Thus, they should promote economic activity and not create debt burdens.
- However, the challenge is that politics, personal interests and instability can act as significant blocks to regional cooperation and prosperity.
- The comments are seen as a remark on Pakistan which has denied India transit access to Afghanistan.

#### Indian connectivity efforts in the region

The EAM listed practical steps taken by India since 2016 to operationalise the Chabahar port, in Iran. He also described the formation of the India-Uzbekistan-Iran-Afghanistan Quadrilateral group on the joint use of the Chabahar port, as an important development.

He also shared India's proposal to include the Chabahar port in the framework of International North-South Transport Corridor (INSTC).

#### **Post Covid connectivity**

The EAM shared that connectivity has acquired a new significance in the context of post-Covid economic recovery.

At the same time, there is a widespread realization of the need now for more resilient and reliable supply chains. It is a challenge of efficient logistics and the world would need multiple options to address this.

#### **Chabahar Port**

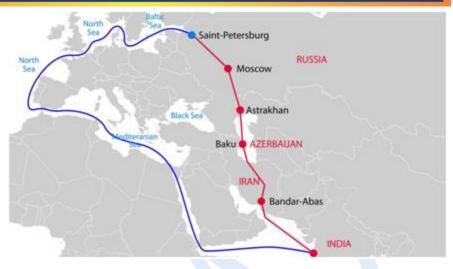
- Chabahar port is located in southeastern Iran, on the Gulf of Oman.
- It is easily accessible from India's western coast and is seen as a counter to Pakistan's Gwadar Port, developed with Chinese investment and is located at distance of around 80 kms from Chabahar.
- The port helps India to bypass Pakistan (which has blocked land transit for India through its territory), in order to gain access to Afghanistan and Central Asia.
- Thus, the port is considered as a gateway to opportunities for trade by India, Iran and Afghanistan with central Asian countries.





#### International North-**South Transport Corridor** (INSTC)

(INSTC) is a 7,200kmmulti-mode long transport project for moving freight among India, Iran, Afghanistan, Armenia, Azerbaijan, Russia, Central Asia and Europe.



- Ratified by Russia, India and Iran in 2002, the INSTC treaty aims to increase economic cooperation for all the nations on the corridor.
- This will help to reduce costs in terms of time and money over the traditional route in use.
- India, Iran, Russia, Turkey, Azerbaijan, Kazakhstan, Armenia, Belarus, Tajikistan, Kyrgyzstan, Oman, Ukraine, Syria are member states of INSTC. Bulgaria has observer status.

#### **INDIA-US**

Why in News: On his recent visit to India, Antony Blinken, Secretary of State of United States held talks with India's External Affairs Minister S. Jaishankar

The two sides discussed cooperation on a wide range of issues, including Afghanistan, countering COVID-19, the Indo-Pacific strategy and the Quad. During his visit, Mr. Blinken also met India's Prime Minister, National Security Adviser, members of civil society and a representative of the Dalai Lama.

#### Highlights of the meeting

- The two sides underlined that both India and the US believe in human dignity, equality of opportunity, the rule of law, fundamental freedoms, including freedom of religion and belief.
- They shared that the relationship between the two countries is so important and strong because it is a relationship between two democracies.
- India welcomed the strong commitment shown by US to strengthen the India-US strategic partnership, which is rooted in shared democratic values.



#### **Discussion on Afghanistan**

- On Afghanistan, the two sides agreed that there was no "military solution" to the conflict in Afghanistan.
- If Taliban took Afghanistan by force and abused the rights of the people and committed violence, it would not gain the international recognition it seeks and such an Afghanistan cannot be a part of the global community.
- This was in reference to the violence committed by Taliban in several parts of Afghanistan in the recent past.
- The two leaders underlined the gains to Afghan civil society, especially on the rights of women, minorities, and on social freedoms over the last two decades. Going forward, it is important to work collectively to preserve these gains.

#### **Discussion on Quad**

- Both the sides highlighted the cooperation in the Indo-Pacific as part of the 'Quad' with Japan and Australia.
- Blinken underlined that the Quad is not a military alliance and it would also deal with other issues like Covid-19, advancing the climate agenda, dealing with emerging technologies etc.
- Jaishankar, expressed India's commitment for further collaboration on these issues along with underlining the importance of observing international law and rules and norms. He further shared that the opportunity for the four countries to work more closely in the Quad benefits the international community as a whole.

#### **Grant for vaccines**

Blinken announced a \$25-million grant for India's vaccine program, and promised to strengthen vaccine supply chains to enhance production.

#### Meeting with Dalai Lama's representative

- On his visit to India, Mr. Blinken also met a representative of Dalai Lama and an official of the Tibetan government in exile.
- This was seen as a clear message to China about the continued US support to the Tibetan cause.
- The Tibet issue from 1949 the People's Liberation Army of China started marching into various regions of Tibet, which led to several uprisings.
- In 1959 an uprising took place in Tibet against China's moves to introduce various social and political changes in Tibet. Thousands of people died in the uprising. After this, the 14th Dalai Lama and thousands of Tibetans fled to India. India is still home to more than 150, 000



Tibetan refugees. Since 1959 Tibet is administered by China. Later in 1965, Chinese government established Tibetan Autonomous Region (TAR). TAR is essentially the area of Tibet within the People's Republic of China.

#### **Central Tibetan Administration**

- The Central Tibetan Administration (CTA) also known as the Tibetan Government in Exile was established by Dalai Lama in 1959, in Mussoorie. It 1960, the CTA was shifted to Dharamshala.
- Since its formation in 1959, the Central Tibetan Administration has not been officially recognised by China.

#### Quad

The Quad is an informal strategic forum of the United States, Japan, Australia and India that is maintained by talks between member countries. The stated aim of Quad is to promote freedom, liberty and democracy.

#### Significance of Quad

- The grouping underlines the rising significance of maritime geopolitics in an increasingly integrated world.
- It aims to push for broad economic development by utilising the full potential of the Indo-Pacific and promoting connectivity.
- It can also lead to development of infrastructure based on principles of transparency and openness, while avoiding unsustainable debt burdens.
- It can also help to uphold respect for international law and promote a rules-based order in the Indo-Pacific.





### SECURITY AND DEFENCE

- **❖** Paper III: This section is relevant to the following topics:
- Linkages between development and spread of extremism.
- Role of external state and non-state actors in creating challenges to internal security.
- Challenges to internal security through communication networks, role of media and social networking sites in internal security challenges, basics of cyber security; money-laundering and its prevention
- Security challenges and their management in border areas; linkages of organized crime with terrorism
- Various Security forces and agencies and their mandate
- Prelims Oriented Questions



#### 3.1 INDIA'S NAVEL PRESENCE

Why in News: India will continue to maintain naval presence in the troubled Persian Gulf and Gulf of Oman, which is aimed at protecting and reassuring Indian-flagged merchant vessels and oil tankers transiting through the region.

#### **Region in Focus**

#### **Gulf of Oman**

- The Gulf of Oman or Sea of Oman is located in the Indian Ocean.
- It is a gulf that connects the Arabian Sea with the Strait of Hormuz, which then runs to the Persian Gulf.
- A gulf is a large inlet from the ocean into the landmass, typically with a narrower opening than a bay.
- It borders Iran and Pakistan on the north, Oman on the south, and the United Arab Emirates on the west.

#### **Strait of Hormuz**

- The Strait of Hormuz is a strait between the Persian Gulf and the Gulf of Oman.
- Strait is a narrow passage of water connecting two seas or two other large areas of water.
- A third of the world's liquefied natural gas and almost 25% of total global oil consumption passes through the strait, making it a highly important strategic location for international trade. It provides the only sea passage from the Persian Gulf to the open ocean.

#### **Persian Gulf**

- The Persian Gulf is the extension of Gulf of Oman through the Strait of Hormuz and lies between Iran to the northeast and the Arabian Peninsula to the southwest.
- The Persian Gulf and its coastal areas are the world's largest single source of petroleum, and related industries dominate the region.
- Safaniya Oil field, the world's largest offshore oil field, is located in the Persian Gulf.

#### **News Updates**

- The Strait of Hormuz is a major international chokepoint. Disruption in trade in this region can have a major impact on India's economy.
- India has an 82.8% import dependence for crude oil and 45.3% for natural gas/LNG.



- Around 60% of India's oil imports come from this region. Also, the Indian diaspora numbers around 8.5 million in the region.
- Under 'Operation Sankalp', India continues to deploy a frontline warship, either a destroyer or a frigate with a helicopter and a marine commando intervention team, in the region.

#### **Operation Sankalp**

- In June 2019, two foreign oil tankers were attacked in the Gulf of Oman. This added more tension to the already-existing tension between the United States and Iran.
- Subsequently, India launched 'Operation Sankalp' to protect and reassure Indian flagged merchant vessels and oil tankers transiting through the region. Under the operation, the Indian Navy had deployed destroyer INS Chennai and patrol vessel INS Sunanya to the Gulf of Oman.
- Two years later, the forward naval deployment continues. As many as 23 Indian warships in rotation have been deployed to the Gulf region, with an average of 16 Indian-flagged merchant vessels and tankers being provided safe passage on a daily basis.
- Operation Sankalp is now part of the Mission-based Deployments (MBDs) of the Indian Navy.

#### **Indian Navy's Mission-based Deployments**

The initiative was launched by the Indian Navy in 2017 to deploy mission-ready ships and aircrafts on a "sustained basis across the Indian Ocean" to meet any operational contingency from conventional threats and maritime terrorism to piracy and humanitarian disaster relief.

#### Under the program, the Indian Navy ships are Mission Deployed for:

- 'Operation GULFDEP' in the Gulf of Oman and Persian Gulf and
- 'Operation MALDEP' in the Andaman Sea and approaches to the Malacca Strait.

The Navy says one of its key roles as a security provider for the country's "Blue Economy" includes maintaining a secure and stable maritime environment to enable unhindered pursuit of maritime economic activities.

#### 3.2 DRUGS TRAFFICKING

Why in News: In the biggest drug bust in history, Delhi Police's has seized 354kg of grade A heroin along with four key members of a cartel, including a chemical expert who turned crude powder into pure heroin.



#### **News Update**

- The drug network is spread across several countries with kingpins based in Canada, Portugal and Afghanistan.
- There are multiple active modules in India to carry out narco-terrorism activities in the country.
- The cartel was importing drugs under the cover of legitimate goods like talc stone, gypsum powder and basil seeds. It was then transported in containers to Iran's Chabahar port.
- From there, the consignments were shipped to Mumbai. Thereafter, the material was separated from the legitimate consignments. Special chemical experts from Afghanistan were then roped in to process the contraband and turn it into pure and saleable heroin.

### **DRUGS WORTH ₹2,500 CRORE SEIZED**

#### **MODUS OPERANDI**

- > Opium grown in parts of Afghanistan hidden in different legitimate exports, such as talc stone, gypsum powder, basil seeds, and in packaging material like gunny bags, cartons, etc
- > Transported in containers to Chabahar Port in Iran and then shipped to Mumbai Port
- > Contraband sent to makeshift factories based in MP and Delhi for further extraction to get pure heroin
- > Afghan experts arrive in Delhi and use special chemicals to process the heroin
- > Fully extracted heroin delivered to Punjab, Delhi, Haryana, Rajasthan, J&K and other parts of India



- > Special Cell nabs a smuggler. Rizwan Kashmiri, with 1kg heroin from south Delhi
- > He reveals to be working for an Afghanistan-based cartel commander, Isha Khan
- > Rizwan was to contact Punjab-based smugglers, **Gurpreet Singh and Gurjot** Singh, operating from Sector 65, Faridabad
- > Both apprehended: two cars having 281kg of heroin seized: 70kg heroin found in bed box of flat
- > Fourth suspect, Hazrat Ali from Kandahar, nabbed from Gurgaon with 2kg heroin and 100kg chemical
- > The duo named one Navpreet Singh based in Portugal as the kingpin

**Drugs smuggling issue** 

**Drug Trafficking in India** 



India is vulnerable to narcotic drug trafficking as it is located between two largest Opium producing regions of the world i.e. Golden Crescent (Afghanistan-Pakistan-Iran) in the west and Golden Triangle (Thail



and-Laos-Myanmar) in the east.

- These are Asia's two principal areas of illicit opium production located at the crossroads of Central, South, and Western Asia.
- Indigenous production of low grade heroin as well as various psychotropic and prescription drugs and their growing demand in the neighbouring countries and international market have added a new dimension to the problem of drug trafficking.
- Trafficking of drugs takes place overwhelmingly through land borders followed by sea and air routes. The Pakistan border has been the main entry point of drugs into Punjab.





#### Strategy to decrease drug demand

The Government of India is tackling the issue of drugs through its two-pronged strategy i.e.

- Supply reduction
- Demand reduction
- **Supply reduction** falls under the purview of the enforcement agencies. Controlling the smuggling of drugs from abroad is dealt by the Home Ministry, BSF and Narcotics Department.
- The demand reduction strategy is in the domain of social sector. Ministry of Social Justice & Empowerment in the Government of India is responsible for implementation of demand reduction activities in the country.

#### Steps taken by Government of India to deal with drug trafficking

- India has tried to tackle the menace of drug trafficking through the strategy of drug supply and demand reduction, which involves enacting laws, co-operating with voluntary organisations, securing its borders and coasts by increasing surveillance, as well as seeking the active cooperation of its neighbours and the international community.
- Laws: Section 71 of the Narcotic Drugs & Psychotropic Substance Act, 1985, empowers to Government for establishment of identification, treatment and rehabilitation centres for drug addiction.

#### **Agencies**

- The Narcotics Control Bureau (NCB) is India's nodal agency to fight drug trafficking.
- The Narco Coordination Centre (NCORD) was constituted in 2016 in NCB for effective coordination amongst the various drug law enforcement agencies as well as different departments/ministries.
- NCB has been provided funds for developing a new software i.e. Seizure Information Management System (SIMS) which will create a complete online database of drug offences and offenders.

#### **Funds**

 The government has constituted a fund called National Fund for Control of Drug Abuse to meet the expenditure incurred in connection with combating illicit traffic in Narcotic Drug, Psychotropic Substances; identifying, treating and rehabilitating addicts, and educating public against drug abuse, etc.



 The Home ministry also revived the scheme of Financial Assistance to States for Narcotics Control.

**International Cooperation:** India have also signed 05 Bilateral Agreements/MoUs in recent years with Australia, Singapore, Mozambique, Thailand and Nepal in drug matters.

#### Other measures

- The government has also conducted National Drug Abuse Survey to measure extent, pattern and trends of drug abuse in India which presents the major findings of the survey in terms of proportion of Indian population using various substances and those affected by substance use disorders.
- Various agencies also carried out destruction of illicit cultivation of cannabis and opium poppy all over the country.
- In 2017, the government approved new reward guidelines with increased quantum of reward for interdiction or seizure of different illicit drugs.

#### ADD ON

The Ministry of Home Affairs (MHA) recently shared details of India's efforts to combat illicit trafficking of narcotic, drugs and psychotropic substances

#### 'Narcotic Drugs and Psychotropic Substances'

- A narcotic drug is an addictive drug that reduces pain, induces sleep and may alter mood or behaviour.
- A psychotropic drug is a chemical substance that changes brain function and results in changes in perception, mood, consciousness or behaviour.
- Some categories of narcotic and psychoactive drugs, which have therapeutic value, are prescribed by physicians and other healthcare practitioners.
- These substances are also used illegally (without medical prescription) to improve performance or change one's consciousness.

#### **News Update**

The Ministry of Home Affairs (MHA) recently shared details of India's efforts to combat illicit trafficking of narcotic, drugs and psychotropic substances.

#### India's Initiatives to control drug trafficking

#### **International pacts**



- India has signed 26 bilateral pacts, 15 memoranda of understanding and two agreements on security cooperation with different countries to combat drug trafficking.
- The Narcotics Control Bureau (NCB) coordinates with various international organisations for sharing information and intelligence to combat transnational drug trafficking. These include:
  - SAARC Drug Offences Monitoring Desk;
  - Brazil, Russia, India, China and South Africa (BRICS);
  - Colombo Plan;
  - Association of Southeast Asian Nations (ASEAN);
  - ASEAN Senior Officials on Drug Matters (ASOD);
  - Bay of Bengal Initiative For Multi-Sectoral Technical and Economic Co-Operation (BIMSTEC);
  - United Nations Office on Drugs and Crime (UNODC); and
  - International Narcotics Control Board (INCB)

#### **NCORD** mechanism

- The Narco Coordination Centre (NCORD) mechanism was set up in 2016, by the MHA, for coordination among various Central and State agencies, for effective drug law enforcement.
- The NCORD system was later restructured in 2019, into a four-tier mechanism up to district level, for better coordination.

#### **Efforts related to drug seizures**

- A Joint Coordination Committee with the NCB Director General as its chairman was set up in 2019, to monitor the investigation into cases involving large seizures.
- Moreover, the Directorate of Revenue Intelligence, the Border Security Force, Sashastra Seema Bal, Indian Coast Guard, Railway Protection Force and the National Investigation Agency have also been empowered under the NDPS Act for making drug seizures.
- For digitisation of pan-India drug seizure data, the MHA had launched an e-portal called SIMS (Seizure Information Management System) in 2019, for all the drug law enforcement agencies under the mandate of NDPS Act.

#### **Impact**

These initiatives have led to a gradual increase in the registration of drug trafficking related cases in the country.

Narcotic Drugs and Psychotropic Substances (NDPS) Act



- The NDPS Act, enacted in 1985, is the primary law for dealing with drugs and their trafficking in the country. The Act has since been amended thrice in 1988, 2001 and 2014.
- The NDPS Act was passed to meet India's global treaty obligations under the Single Convention on Narcotic Drugs, Convention on Psychotropic Substances and United Nations' Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances.

### **Provisions of the NDPS Act**

- The Act prohibits production, manufacture, sale, purchase, transportation and consumption of many narcotic drug or psychotropic substances, including cannabis, heroin, opium The law, however, does not apply to bhang.
- Anyone who violates the NDPS Act, faces punishment based on the quantity of the banned substance. The classification of the quantity varies from substance to substance.
- The maximum punishment that can be given under this Act is death penalty. However, death penalty can only be given to repeat offenders, on the discretion of a judge.
- The Act makes a distinction between individual drug consumers and drug traffickers. It allows courts to release an addict for treatment if found guilty of consumption of drugs.

## **Narcotics Control Bureau (NCB)**

- As per NDPS Act, the central government can form an authority to exercise its powers for preventing and dealing with abuse of and illicit trafficking of narcotic drugs.
- The government subsequently constituted the Narcotics Control Bureau in 1986, under the Ministry of Home Affairs.
- The agency is tasked with coordinating with the state governments and other authorities, under NDPS Act, Customs Act, Drugs and Cosmetics Act and any other law, for the enforcement of the provisions of the NDPS Act.
- The NCB also coordinates actions taken by other concerned ministries, departments and organizations in respect of matters relating to drug abuse.



## **ECONOMY**

- **❖** Paper III: The articles in this section are relevant to the following topics:
- Indian Economy and issues relating to planning, mobilization of resources, growth, development and employment.
- Inclusive growth and issues arising from it.
- Government Budgeting.
- Effects of liberalization on the economy, changes in industrial policy and their effects on industrial growth.
- Infrastructure: Energy, Ports, Roads, Airports, Railways etc.
- Investment models.
- Agriculture



## 4.1 BHARAT NET PROJECT

Why in News: Recently, the Union Cabinet approved a viability gap funding support for the implementation of the Bharat Net project through Public-Private Partnership (PPP) model in 16 States.

## **Bharat Net Project**

## **National Optical Fiber Network (NOFN)**

- NOFN is an ambitious initiative (started in October 2011) to trigger a broadband revolution in rural areas.
- It aims to connect all the 2, 50,000 Gram panchayats in the country and provide 100 Mbps connectivity to all gram panchayats (GPs).
- To achieve this, the existing fibers of PSUs (BSNL, Railtel and Power Grid) were utilised and incremental fiber was laid to connect to Gram Panchayats wherever necessary.
- Bharat Broadband Network Limited (BBNL) is a government-owned telecom infrastructure provider, set up by the Department of Telecommunications, Ministry of Communications, Government of India, for the establishment, management and operation of the NOFN.
- The NOFN project was funded by the Universal Service Obligation Fund (USOF), established in 2002 to provide subsidies to ensure that telegraph services are provided across India (especially in rural and remote areas).

#### BharatNet

- Based on NOFN experiences, a newer, updated and upgraded version BharatNet was conceived (in 2015) as a nation-wide broadband network.
- It is a project of national importance to establish (by 2017) a highly scalable network infrastructure accessible on a non-discriminatory basis.
- It aims to provide on demand, affordable broadband connectivity of 2 Mbps to 20 Mbps for all households and on demand capacity to all institutions.
- The entire project is being funded by Universal service Obligation Fund (USOF).
- Vision: To realise the vision of Digital India, in partnership with States and the private sector.
- Objective: To facilitate the delivery of e-governance, e-health, e-education, e-banking, Internet and other services to rural India.

#### **Implementation**

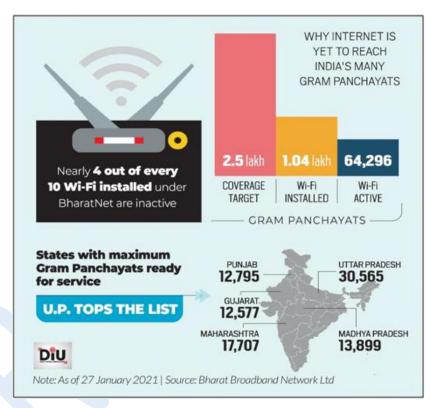


- The project is a Centre-State collaborative project, with the States contributing free Rights of Way for establishing the Optical Fiber Network.
- The project is carried out in three major phases laying down the cable (by December 2017), installing the Wi-Fi hotspots (by March 2019), and making the hotspots active (from 2019 to 2023).

## Status of the project

Reasons responsible for the delay in the project completion:

- Implementation is very challenging as the project is of mega nature and the Gram **Panchayats** widely dispersed across the country in rural and remote areas.
- Unavailability of agency that can provide the services on a longterm basis.
- Adding to the roadblocks, are the unavailability of



## reliable power or infrastructure for access points, etc.

#### **News Summary**

- The Cabinet has in-principle approved implementation of BharatNet in 16 States in a PPP model with a total expense of ₹29,430 crore.
- The Government of India will only spend the viability gap fund of ₹19,041 crore, that would help in covering an estimated 3.61 lakh villages via BharatNet.
- Viability Gap Funding (VGF) is a grant one-time or deferred provided to support infrastructure projects that are economically justified but fall short of financial viability.
- The lack of financial viability usually arises from long gestation periods and the inability to increase user charges to commercial levels.

The project will be extended to all inhabited villages beyond the gram panchayats in 16 States.



This will enable better access to e-services offered by various governments, which would further help in bridging the rural-urban divide of digital access.

## **Significance of PPP model**

- It will leverage private sector efficiency for operation, maintenance, utilisation and revenue generation and is expected to result in the faster roll out of BharatNet.
- It is expected to provide reliable, high speed broadband services as per predefined Services Level Agreement (SLA).
- The private sector partner is expected to bring an equity investment and raise resources towards capital expenditure and for operation and maintenance of the network.

## 4.2 GOODS AND SERVICES TAX (GST)

Why in News: On the completion of 4 years of GST, the Prime Minister said that GST has been a milestone in the economic landscape of India. He shared that it has decreased the number of taxes, compliance burden and overall tax burden on the common man.

## Goods and Services Tax (GST)

- Goods and Services Tax (GST) is an indirect tax (or consumption tax) imposed in India on the supply of goods and services. It is a comprehensive multistage, destination based tax.
- Comprehensive because it has subsumed (covered) almost all the indirect taxes except a few.
- Multi-staged as it is imposed at every step in the production process, but is meant to be refunded to all parties in the various stages of production other than the final consumer.
- A destination based tax, as it is collected from the point of consumption and not the point of origin like previous taxes.
- Under GST, States gave up some of their taxation rights for which the Centre is supposed to share the tax revenue with the States.

### **Components of GST**

### **CGST and SGST**

- GST includes a tax imposed by the Centre on the intra-state supply of goods and services called Central GST (CGST).
- Further it also includes a tax imposed by states/UTs called the State GST (SGST/UTGST) on these goods and services.



- CGST and SGST are imposed simultaneously on every purchase of goods and services, except the goods and services that are exempt from it.
- The consumer pays an overall rate under one of the major tax slabs: 5%, 12%, 18% and 28% out of which half goes to the Centre and half to the state where consumption of the goods or services takes place.

#### **IGST**

- Integrated GST (IGST) is the GST levied on inter-state transactions and exports/imports of goods and services.
- IGST is a combination of SGST and CGST and is imposed and administered by the Centre. The Centre then distributes it between the consuming state and itself.

## **Compensation Cess**

- In addition, a compensation cess ranging from 1-200% is imposed on sin and luxury goods like cigarettes, pan masala and certain categories of automobiles, over and above the topmost slab of 28%. For example, SUV vehicles (more than 4 meters) are charged 50 per cent GST, of which the GST tax rate is 28 per cent and the compensation cess is 22 per cent.
- Sin goods are goods considered harmful to the society.

#### **GST Council**

- GST Council is the governing body of GST. It is headed by the Union finance minister, who is assisted by the finance ministers of all the states of India.
- It is an apex member committee to modify, reconcile or to obtain any law or regulation based on GST in India.
- It is also responsible for revision of rates of the goods and services in India.

### **News Update**

## Analysis of GST's performance

- The GST regime was launched with an ambitious expectation that it will lead to an increase in the GDP by 1-2 percentage points.
- It was expected that GST will widen the tax base and revenue collections would grow based on the inbuilt efficiency of a fully technological infrastructure.
- However, these goals are yet to achieve the desired result. Moreover, it has fallen short of the expectation that it will be a simple, transparent and self-policing tax regime.



## Low revenue collections

Although the government has relied on technology for reducing frauds and leakages, over the past four years gross monthly GST collections have largely stabilised around the same level of Rs 1-lakh-crore mark.

1	2017-18	2018-19	2019-20	2020-21
Corporation tax	5,71,202	6,63,572	5,56,876	4,57,180
Income tax	4,08,203	4,61,654	4,80,348	4,69,226
GST(Centre's share)	3,81,584	4,88,889	5,06,231	4,66,030
Excise	2,58,636	2,30,998	2,39,452	3,89,662
All figures in ₹ crore		Source:	CGA, Finan	ce Ministry

- Gross GST collections, which include the share of states as well, grew only by 3.8 per cent in 2019-20 over the previous fiscal year, before declining by 6.9 per cent in 2020-21.
- The Centre's share of GST collections grew only by 3.5 per cent in 2019-20 over the previous fiscal year, before dropping by 7.9 per cent in 2020-21 (primarily due to the pandemic).

#### Reasons for low tax collections

- According to experts, the trends indicate the inability of the tax administration to expand the number of taxpayers under indirect tax.
- Many small businesses are still unable to comply with the increase in procedural requirements, while others are reluctant to come under the GST regime.
- Stakeholders from the industry still ask for a further simplification of the GST structure, especially for smaller and mid-level taxpayers.
- Moreover, the slowdown in economy during the pandemic has further worsened the compliance record.

### **Issues in GST Council**

- The GST council was supposed to resolve issues between the Centre and States but it faces a tough challenge from the increasing differences between the Centre and the States.
- States have repeatedly raised issues like pending compensation payments, low revenue collections and revenue leakages, in the GST Council.

## **Future Outlook**

- Over the years, various amendments have been introduced for the adoption of GST and it is expected that even the excluded sectors will be included under GST sooner or later.
- While a lot has been done, India's journey alongside GST is fairly new, and several areas are still to be resolved, especially topics such as continuation of compensation cess, inclusion of excluded sectors, rate rationalizations, etc.



• It is hoped that all the stake holders will come together to resolve the ongoing issues to realise the vision of One Nation One Tax.

## 4.3 DIGITAL INDIA

Why in News: On the successful completion of six years of Digital India, Prime Minister Narendra Modi interacted with the beneficiaries of various schemes under it.

## **Key points from the PM's speech**

- The PM shared that the day reminds of the huge leap the country has taken in the digital space in the last 6 years.
- Digital India means opportunity for all, facility for all, participation of all. It also means a transparent, non-discriminatory system and an attack on corruption.
- The current need is to bridge the gap between government and people; system and facilities; and problems and solutions.
- Following the principles of 'Minimum Government, Maximum Governance', Digital India is helping the country to bridge these gaps. Thus, Digital India is the instrument for Aatma Nirbhar Bharat and is also a demonstration of a strong India emerging in the 21st century.

## **Benefits of Digital India**

- The PM shared that Digital India has streamlined many processes due to which many tasks like filing income tax, paying utility bills, applying for birth certificate etc. have become fast and easy.
- All these services are also available to people at the Common Service Centers in villages.
- Digital India is also helping to fulfill the resolution of One Nation, One Ration Card (ONORC).
- During the pandemic, colleges in many cities are carrying out verification of school certificates for admission with the help of Digi Locker
- Villagers are getting legal documents of their houses digitally, through the Svamitva scheme, which will help to address the disputes related to houses in villages.

#### Benefits in the domain of health

- The PM underlined that Digital India is playing an important role in ensuring health facilities in remote areas.
- One of the world's largest digital contact tracing apps, Aarogya Setu, has helped a lot in preventing corona infection.



• Several countries are showing interest in India's COWIN app for vaccination. Having such a monitoring tool for the process of vaccination is proof of India's technical proficiency.

## Financial inclusion through digital transactions

- The PM shared that in the last 6-7 years, about Rs 17 lakh crore has been directly transferred to the bank accounts of people under different schemes through direct benefit transfer (DBT).
- Digital transactions have also brought a huge change in the lives of farmers. Under the PM Kisan Samman Nidhi, Rs 1 lakh 35 crore has been deposited directly into the bank accounts of more than 10 crore farmer families.
- Business transactions worth about five lakh crore rupees take place every month in India through BHIM UPI.
- The SVANidhi scheme has helped underprivileged street vendors to get easy and cheap loans from banks.

#### Miscellaneous benefits

- The PM shared that crores of students of the country are now benefiting from the platforms developed for online education.
- With the introduction of FASTag, the commute has become easier, cheaper along with saving significant time.
- Similarly, GST has ensured both convenience and transparency in trade and business in the country.
- At the same time, government procurement from Govt e-Marketplace (GeM) has increased transparency and provides opportunities to small traders.

## **Digital India**

- The Digital India program was launched in 2015, with a vision to transform India into a digitally empowered society and knowledge economy.
- It is an umbrella program that covers multiple government Ministries and Departments. The overall coordination is done by the Department of Electronics and Information Technology (Deity).
- It brings together a large number of ideas into a single, comprehensive vision so that each of them can be implemented as part of a larger goal.

#### **Vision Areas of Digital India**

The Digital India program is centered on following three key vision areas:



- Digital infrastructure as a core utility to every citizen
- Availability of high speed internet as a core utility for delivery of services to citizens.
- A digital identity for every citizen that is unique, lifelong, online, which can be authenticated.
- Mobile phone & bank account enabling citizen participation in digital & financial space.
- Easy access to a Common Service Centre.
- Shareable private space on a public cloud.
- Safe and secure cyber-space.

#### **Governance & Services on Demand**

- Seamlessly integrated services across departments or jurisdictions.
- Availability of services in real time from online & mobile platforms.
- Digitally transformed services for improving ease of doing business.
- Making financial transactions electronic & cashless.
- Using Geospatial Information Systems (GIS) for decision support systems & development.

## **Digital Empowerment of Citizens**

- Universal digital literacy.
- Universally accessible digital resources.
- Availability of digital resources/services in Indian languages.

### **Nine Pillars of Digital India**

Digital India consists of the following nine pillars:

## 1) Broadband Highways

This pillar covers three sub components, namely Broadband for All - Rural, Broadband for All - Urban and National Information Infrastructure (NII).

## **National Information Infrastructure (NII)**

- NII would integrate the network and cloud infrastructure in the country to provide high speed connectivity and cloud platform to various government departments up to the panchayat level.
- These infrastructure components include networks such as State Wide Area Network (SWAN), National Knowledge Network (NKN), National Optical Fiber Network (NOFN), Government User Network (GUN) and the MeghRaj Cloud.



 Department of Electronics and Information Technology (DeitY) is the nodal Department for this project.

## 2) Universal Access to Mobile Connectivity

- This pillar focuses on network penetration and filling the gaps in mobile connectivity in the country.
- As part of the comprehensive development plan for North East, providing mobile coverage to uncovered villages has been initiated.
- Mobile coverage to remaining uncovered villages would be provided in a phased manner.
- The Department of Telecommunications is the nodal department for this initiative.

## 3) Public Internet Access Program

The two sub components of this pillar are Common Services Centers (CSCs) and Post Offices as multi-service centers. Under it, a total of 150,000 Post Offices are proposed to be converted into multi-service centers.

## 4) E-Governance - Reforming Government through technology

- This pillar entails, improving the efficiency of government processes through the use of Information Technology.
- All government databases and information should be in electronic form.
- The workflow inside government departments and agencies should be automated and it should also allow visibility of these processes to citizens.

## 5) eKranti

In order to transform e-Governance, and promote good governance, the e-kranti pillar has the following key principles:

- Transformation and not Translation All project proposals in e-Kranti must involve substantial transformation in the quality, quantity and significant enhancement in productivity and competitiveness.
- Integrated Services and not Individual Services A common middleware and integration
  of the back end processes and processing systems is required to facilitate integrated
  service delivery to citizens.
- ICT Infrastructure on Demand Government departments should be provided with Information and Communications Technology (ICT) infrastructure, such as connectivity, cloud and mobile platform on demand.



- Mobile First All applications should be designed/ redesigned to enable delivery of services through mobile.
- Language Localization All information and services in e-Governance projects should be available in Indian languages as well

## 6) Information for All

- Online hosting of information & documents to facilitate open and easy access to information for citizens.
- Government shall pro-actively engage through social media and web based platforms to inform and interact with citizens.

## 7) Electronics Manufacturing

This pillar focuses on promoting electronics manufacturing in the country with the target of NET ZERO Imports by 2020.

## 8) IT for jobs

This pillar focuses on providing training to the youth in the skills required for availing employment opportunities in the IT sector.

## 9) Early Harvest Programs (EHP)

EHP consists of those projects which are to be implemented in a short timeline. Some of the projects under EHP are:

- Biometric Attendance
- Wi-Fi in All Universities
- Secure email within government
- Public Wi-fi hotspots
- SMS based weather information
- National Portal for lost and found children

The initiatives under Digital India fall under three umbrellas:

#### A.DI initiatives - Infrastructure

### Aadhaar

 Aadhaar identity platform is one of the key pillars of 'Digital India', under which every resident of the country is provided with a unique identity or Aadhaar number.



• It is a strategic policy tool for social and financial inclusion, public sector delivery reforms, managing fiscal budgets, increasing convenience and promoting hassle-free people-centric governance.

#### **BharatNet**

- BharatNet originally named National Optical Fiber Network or NOFN, aims to lay down 8
  lakh kilometer of incremental optical fiber cable (OFC) to all the 2,50,000-plus Gram
  Panchayats (GP) in the country.
- The objective is to extend fiber connectivity available at the state capital, district headquarters and blocks to every panchayat, and provide broadband internet services to 69 per cent of India's rural population.
- It aims to facilitate the delivery of e-governance, e-health, e-education, e-banking, and other services to the rural India.

## **Common Service Centers (CSCs)**

- CSCs are the access points for delivery of essential public utility services, social welfare schemes, healthcare, financial, education and agriculture services, for citizens in rural and remote areas of the country.
- In doing so, it is enabling the government's mandate of a socially, financially and digitally inclusive society.

### **Digi Locker**

- Digi Locker is a Digital Wallet to empower citizens digitally. It's a secure cloud based platform for issuance, sharing and verification of critical lifelong documents or certificates.
- It provides access to authentic digital documents issued from over 100 issuers including, Central & State agencies such as Transport Department, Income Tax Department, Revenue Department, State & Central Education Boards etc.
- It has created a new ecosystem for true paperless governance by promoting usage of digital documents.

## **Government e-Marketplace (GeM)**

- Government e-Marketplace (GeM) is single window solution for online procurement of common goods & services required by various government departments/organizations/PSUs.
- It aims to enhance transparency, efficiency and speed in public procurement.



• It also provides the tools for direct purchase, e-bidding and reverse e-auction to facilitate the government users to achieve the best value for the money.

#### B. DI initiatives - Services

#### BHIM

- Bharat Interface for Money (BHIM) is an app that makes payment transactions simple, and quick using Unified Payments Interface (UPI).
- It enables direct bank to bank payments instantly and collects money using a Mobile number or Payment address.

## **Crime and Criminal Tracking Network & Systems (CCTNS)**

- CCTNS aims at creating a comprehensive and integrated system for enhancing the efficiency and effectiveness of policing.
- It intends to create a nationwide networking infrastructure for investigation of crime and detection of criminals.

#### e-Pathshala

Developed by NCERT, e-Pathshala provides educational e-resources including textbooks, audio, video, periodicals through website and mobile app.

#### GIS

- Geographic Information System (GIS Software) is designed to store, retrieve, manage, display and analyze different types of geographic and spatial data.
- It allows users to produce maps and other graphic displays of geographic information for analysis and to build decision support systems in any organization or research bodies.

## Goods and Service Tax Network (GSTN)

GSTN aims to provide reliable, efficient and strong IT infrastructure for the smooth functioning of the Goods & Services Tax. This will enable economic agents to use the entire nation as One Market with minimal indirect tax compliance cost.

## **CoWIN**

 CoWIN is a cloud-based IT solution for planning, implementing, monitoring, and evaluating COVID-19 vaccination in the country.



• It tracks the beneficiaries and also the vaccines at the national, State and district levels, along with monitoring the utilization, wastage and coverage of vaccination.

## C. DI initiatives - Empowerment

## Pradhan Mantri Jan DhanYojana (PMJDY)

- PMJDY aims to bring about comprehensive financial inclusion of all the households in the country.
- It incorporates universal access to banking facilities, financial literacy, access to credit, insurance and pension facility.

## Aadhaar Enabled Payment System (AEPS)

AEPS is a payment service that allows a bank customer to use Aadhaar as her identity to access her respective Aadhaar enabled bank account and perform basic banking transactions through a Business Correspondent.

#### **NMEICT**

- The National Mission on Education through Information and Communication Technology (NMEICT) uses the potential of ICT, in teaching and learning process for the benefit of all the learners in Higher Education Institutions.
- It aims to address all the education and learning related needs of students, teachers and lifelong learners.

## **Targeted Public Distribution System (TPDS)**

Under the TPDS, the States are required to formulate and implement arrangements for identification of the poor for delivery of food grains and for its distribution in a transparent and accountable manner.

#### **ONORC**

ONORC scheme was launched to enable migrant workers and their family members to buy subsidized ration from any fair price shop anywhere in the country under NFSA

### **Smart Cities**

The objective of Smart Cities is to promote sustainable and inclusive cities that provide core infrastructure and give a decent quality of life to its citizens. It also incorporates a clean and sustainable environment and application of Smart Solutions.



#### Svanidhi Scheme

- SVANidhi scheme is a micro-credit scheme, that provides loans for working capital to around 50 lakh street vendors who have been affected due to the Covid-19 crisis.
- Vendors can take working capital loan of up to ₹10,000, that is repayable in monthly installments within one year.

#### Svamitva scheme

Svamitva scheme aims to provide the 'record of rights' to village household owners in rural areas and issue property cards. These cards are physical copies of property titles of the villagers' homes and the area surrounding their respective houses (as opposed to cultivated land).

## 4.4 NATIONAL PAYMENT CORPORATION OF INDIA

Why in News: The Union government has asked the National Payments Corporation of India (NPCI) to launch a platform for electronic vaccine vouchers. These vouchers will be like electronic prepaid instruments that can be used only for vaccination.

### **National Payments Corporation of India (NPCI)**

- National Payments Corporation of India is an umbrella organisation for operating retail payments and settlement systems in India.
- It is a joint initiative of Reserve Bank of India (RBI) and Indian Banks' Association (IBA).
- It is a "Not for Profit" Company under the provisions of Companies Act, 2013.
- The organisation functions under the provisions of the Payment and Settlement Systems Act, 2007in order to create robust payments and settlement infrastructure in India.
- It aims to provide infrastructure to the entire Banking system in India for physical as well as electronic payment and settlement systems.

NPCI has made valuable contribution to the banking sector through its products from time to time. The products and their significance are listed below:

#### RuPay

RuPay is an Indigenously developed Payment System – designed to meet the expectation and needs of the Indian consumers, banks and merchant eco-system.



• It supports the issuance of debit, credit and prepaid cards by banks in India and thereby supporting the growth of retail electronic payments in India.

#### **IMPS**

Immediate Payment Service (IMPS) allows transfer of funds instantly within banks across India in real-time around the clock, 365 days of the year.

### **NACH**

National Automated Clearing House (NACH) is an offline web based system for bulk push and pulls transactions. NACH provides electronic mandate platform to register mandates facilitating paper less collection process for the corporate and banks.

#### **ABPS**

Aadhaar Payment Bridge (APB) System is used for crediting DBT (Direct Benefit Transfer) transactions for Government/Government agency disbursements.

### **AEPS**

Aadhar-Enabled Payment System (AEPS) is a bank-led model which allows online interoperable financial transaction at PoS (Point of Sale/Micro ATM) through the Business Correspondent (BC)/Bank Mitra of any bank using the Aadhaar authentication.

### **NFS**

National Financial Switch (NFS) is the largest network of shared Automated Teller Machines (ATMs) in India facilitating interoperable cash withdrawal, card to card funds transfer and interoperable cash deposit transactions.

### UPI

Unified Payments Interface (UPI) is a system that powers multiple bank accounts into a single mobile application (of any participating bank), merging several banking features, seamless fund routing & merchant payments into one hood.

### **Bharat Bill Payment System**

Bharat Bill Payment System is offering one-stop bill payment solution for all recurring payments with 200+ Billers in the categories Viz. Electricity, Gas, Water, Telecom, DTH, Loan Repayments, Insurance, FASTag Recharge, Cable etc. across India.



#### **NETC**

National Electronic Toll Collection (NETC) provides an electronic payment facility to customers to make the payments at national, state and city toll plazas by identifying the vehicle uniquely through a FASTag

## **News Update**

- The government has asked the NPCI to launch a platform to generate electronic vouchers for vaccines.
- Employers can purchase these e-vouchers in bulk and these will be sent to the smart phone of their employee(s).
- The employee will then share the voucher at the hospital for cashless vaccination, and the hospital will get the money instantly credited to its account.
- Currently, private organisations that want to tie up for vaccinating their employees and families do it in a camp mode. This is feasible only when there is a sizeable number of employees.
- In many organisations that have shifted to work-from-home, employees have moved out of the city to their hometowns and returning to the workplace is not feasible.
- Vaccine vouchers will enable such employees to get vaccinated at the nearest centre.
- The vaccine e-vouchers will also enable the private sector to plan when it comes to booking orders with vaccine manufacturers. For hospitals, the advantage is that they will receive payment instantly in their bank account.

## 4.5 MICRO, SMALL and MEDIUM ENTERPRISES (MSMEs)

Why in News: Recently, the Ministry of Micro, Small and Medium Enterprises (MSMEs) announced inclusion of retail and wholesale trade under MSMEs, which will make them eligible to get the benefit of priority sector lending (PSL) under Reserve Bank of India (RBI) guidelines.

## **Priority Sector Lending (PSL)**

- The origins of PSL can be traced back to 1966 when Morarji Desai saw a need for increasing credit to agriculture and small industries. However, the definition for Priority Sector was only formalised based on an RBI report in the National Credit Council in 1972.
- Priority Sector means those sectors which the Government of India and RBI consider as important for the development of the basic needs of the country and are to be given priority over other sectors.



- The banks are mandated to encourage the growth of such sectors with adequate and timely credit. Priority Sector Lending is an important role given by the RBI to the banks for providing a specified portion of the bank lending to few specific sectors (like agriculture and allied activities, etc) for an all-round development of the economy as opposed to focusing only on the financial sector.
- Priority sector guidelines do not lay down any preferential rate of interest for priority sector loans.

Priority Sector includes the following categories: The Priority Sector includes eight identified sectors.

- The biggest is agriculture with an 18% target of total ANBC.
- The other important category is MSMEs.
- In addition, five sectors classified as Priority Sector are housing, export credit, education, social infrastructure and renewable energy.
- Banks lend nearly 40% of their adjusted net bank credit (ANBC or Credit Equivalent Amount of Off-Balance Sheet Exposure, whichever is higher), to the priority sector (approximately ₹39, 50, 205 crore).

## Banks falling under PSL requirement

## 40% lending requirement

Domestic scheduled commercial banks (excluding Regional Rural Banks and Small Finance Banks) and Foreign banks with 20 branches and above. Foreign banks with less than 20 branches. 40 percent lending criteria was to be achieved in a phased manner by 2020.

## 75% lending requirement

- For regional rural banks (RRBs) and small finance banks (SFBs), the PSL target is 75 percent.
- The overall PSL target of only urban co-operative banks will go up in a phased manner from the existing target of 40 per cent to 75 percent by March-end 2024.

**Priority Sector Lending Certificates (PSLCs):** PSLCs are a mechanism to enable banks to achieve the priority sector lending target and sub-targets by purchase of these instruments in the event of shortfall.

This also incentivizes surplus banks as it allows them to sell their excess achievement over targets thereby enhancing lending to the categories under priority sector. Under the PSLC mechanism, the seller sells fulfillment of priority sector obligation and the buyer buys the obligation with no transfer of risk or loan assets.



### **Concerns**

- The banking sector failed to meet the PSL targets: According to an RBI data (2019). As
  banks struggled to meet PSL targets, PSLCs trading volume increased by 270 percent. Also,
  private banks and foreign bankers emerge as major buyers and Public Sector Banks, rural
  regional banks and small finance banks as major sellers (as per RBI).
- PSL contributing to Non-Performing Assets (NPAs): The share of priority sector NPAs, though declined marginally during 2017-18, still constituted a fifth of the total NPAs (as per RBI data).
- Social Infrastructure has a low credit: Bank loans up to a limit of only ₹ 5 crore per borrower for building social infrastructure (namely schools, health care facilities, drinking water facilities, sanitation facilities etc) are eligible for classification under priority sector.

## **News Update**

- The government included retail and wholesale trade enterprises in the MSME Development Act, 2006, which was dropped later on the recommendations of a committee in 2017.
- Four years after excluding it from the MSMEs segment, the government reinstated retail and wholesale trade in the category, making entities eligible for priority sector funding and special liquidity schemes from banks.

## Significance

- The revised guidelines will benefit 2.5 crore retail and wholesale traders.
- The move would also allow them to register on the Udyam portal.
- According to the Confederation of All India Traders (CAIT), traders will be able to avail requisite finances from banks and financial institutions under priority sector lending.
   Besides, traders can avail the benefits of several other government schemes for MSMEs.

## 4.6 OPEN NETWORK FOR DIGITAL COMMERCE

Why in News: The Department for Promotion of Industry and Internal Trade (DPIIT) has issued orders appointing an advisory committee for its Open Network for Digital Commerce (ONDC) project. This is a step in the direction of making e-commerce processes in India, open-source.

#### Open-source

Making software or a process open-source means that the code or the steps of that process
is made available freely for others to use, redistribute and modify it.



 For example, Apple's iOS operating system is closed source, meaning it cannot be legally modified or reverse engineered. On the other hand, Google's Android operation system is open-source, and therefore it is possible for smart phone companies like Samsung, One Plus to modify it for their smart phones.

## **Open Network for Digital Commerce Project**

With Open Network for Digital Commerce, the Government's aim is to make the e-commerce ecosystem open source that will allow sellers to be discoverable across multiple e-commerce platforms for a wider reach to customers.

## **Need to introduce Open Network for Digital Commerce**

- Currently, different e-commerce platforms have different set of rules which makes it difficult for small suppliers and traders to adopt.
- The ONDC is being introduced to address the issue of digital monopolies.
- Digital monopolies refer to a scenario wherein e-commerce giants or Big Tech companies tend to dominate and flout competition law pertaining to monopoly.
- For example, nearly 50,000 mobile retail shops, across India, have shut due to e-commerce platforms' preferential treatment of sellers, colluding with mobile manufacturers for exclusive launches on their platforms, which harms the business interests of small traders.

### Benefit to small traders

- If the ONDC gets implemented and mandated, it would mean that all e-commerce companies will have to operate using the same processes. This could give a huge booster shot to smaller online retailers and new entrants.
- It will help sellers and customers to connect with each other, without the barrier of making an effort of switching between two or more marketplaces for a particular product.

## The benefits of having an open source e-commerce ecosystem include:

- Digitization of the entire value chain
- Standardized operations
- Promoting inclusion of suppliers/sellers
- Efficiency in logistics

**Implementing Agency for ONDC:** The project to integrate e-commerce platforms through a network based on open-source technology independent of any single or unique e-commerce platform has been tasked to the Quality Council of India.



## **Quality Council of India**

- The Quality Council of India (QCI) is an autonomous body set up by the Ministry of Commerce and Industry, jointly with the Indian Industry represented by Associated Chambers of Commerce and Industry of India (ASSOCHAM), Confederation of Indian Industry (CII) and Federation of Indian Chambers of Commerce and Industry (FICCI).
- The Council plays a pivotal role at the national level in propagation, adoption and adherence to quality standards in all important spheres of activities, in order to improve the quality of life and wellbeing of the citizens of India.
- The Chairman of Council is appointed by the Prime Minister on the recommendation of the industry.
- Nodal Ministry: Department of Industrial Policy & Promotion, Ministry of Commerce & Industry

## **News Update**

- The Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce and Industry has set up a nine-member advisory council for creating an Open Network for Digital Commerce (ONDC).
- The council will advise the Government on measures needed to design and accelerate the adoption of ONDC.

## 4.7 COPERATIVES IN INDIA

Why in News: The Government of India has created a new and separate Union Ministry of Cooperation i.e. for a Ministry for the Cooperative sector in India.

### **Cooperatives in India**

- Cooperatives are organizations formed at the grassroots level by people to harness the power of collective bargaining towards a common goal.
- The main aim of Cooperative societies is to provide tangible benefit to all people who face similar problems.
- The Cooperative societies play an important role in the socio-economic development of the country.

Cooperatives in India: The cooperative movement in India plays a crucial role in the agricultural sector, banking and housing. For example:



- In agriculture, cooperative dairies, sugar mills, spinning mills etc. are formed with the
  pooled resources of farmers who wish to process their produce. The country has 1, 94,195
  cooperative dairy societies and 330 cooperative sugar mill operations, which account for
  35% of the sugar produced in the country.
- In banking and finance, cooperative institutions are spread across rural and urban areas. For example, village-level primary agricultural credit societies (PACSs) formed by farmer associations are the best example of grassroots-level credit flow.
- There are also cooperative marketing societies in rural areas and cooperative housing societies in urban areas.

#### **Constitutional Provisions**

- Part IXB of the Constitution deals with the Cooperative Societies.
- The 97th Constitution Amendment Act, 2011 inserted Part IXB in the Constitution of India.
- It deals with the incorporation of co-operative societies, boards, office bearers and other provisions related to cooperatives.

## Laws govern cooperative societies in India

## **Single-state Cooperatives**

- The incorporation, regulation and winding up of co-operative societies (other than those operating in more than one State) is a State subject and is governed by the State laws on cooperative societies.
- A majority of the cooperative societies in India are governed by laws in their respective states (State Cooperative Societies Acts).
- Co-operative societies (single state): The Legislature of a State may, by law, make provisions with respect to the incorporation, regulation and winding up of co-operative societies.
- A "co-operative society" in a state means a society registered or deemed to be registered under any law relating to co-operative societies in the state.
- The State Government and the Registrar of Co-operative Societies appointed by the State are the main regulatory authorities for the co-operative societies.

## **Multistate Cooperatives**

 In the case of co-operatives with objects not confined to one State, their incorporation, regulation and winding up fall in the central domain.



- Multistate Cooperative Societies Act, 2002: Under Art 243ZR in Part IXB of the Constitution, the Parliament has the power to enact laws related to the multi-State co-operative societies. Consequently, the Centre passed the Multi-State Cooperative Societies Act in 2002 to enable for registration of societies with operations in more than one state.
- These are mostly banks, dairies and sugar mill whose area of operation spreads across states.
- The Central Registrar of Societies is their controlling authority, but on the ground the State Registrar takes actions on his behalf.

## **Problems faced by Cooperatives in India**

- **Dormant membership:** Lack of active participation of members in the management of cooperatives.
- Mounting overdue in cooperative credit institutions: Lack of mobilization of internal resources and over-dependence on Government assistance
- Lack of professional management
- Bureaucratic control interference in the management
- Political interference, over-politicization

**97th Constitutional Amendment - Cooperative Societies:** The Parliament in order to address the problems faced by cooperatives, introduced the 97th Amendment to the Constitution in 2011.

It enshrines within Article 19(1)(c) the right to form cooperative societies, by inserting (after the words 'or unions') the words 'or Co-operative Societies'.

It also inserted Article 43B in Part IV of the Constitution as "The State Shall endeavor to promote Voluntary formation, autonomous functioning, democratic Control and professional management of the Co-operative societies".

Nurturing leaders of the future: Cooperative institutions, be it the village-level PACS or the urban cooperative housing societies, elect their leaders democratically, with members voting for a board of directors. Thus, cooperative institutions have served as schools for development of leadership.

For example, the current Union Home Minister had headed the Ahmadabad District Central Cooperative Bank for a long time.



## **News Update**

- In India, a Co-operative based economic development model is very relevant where each member works with a spirit of responsibility.
- Till now, the subject of Cooperation was looked after by the Ministry of Agriculture.
- Now, the Government of India has created a new and separate Union Ministry of Cooperation i.e. for a Ministry for the Cooperative sector in India.

## **Need for the new Ministry**

- Cooperatives flourishing only in a few states: Various studies have shown that the cooperative structure has managed to flourish and leave its mark only in a handful of states like Maharashtra, Gujarat, and Karnataka etc.
- Drying out of funding: Cooperative institutions get capital from the Centre, for which the state governments stand guarantee. This formula had seen most of the funds coming to a few states such as Maharashtra, Gujarat, and Karnataka while other states failed to keep up. Over the years, the cooperative sector has witnessed drying out of funding.

## **The Union Ministry of Cooperation**

## **Objectives**

- It will provide a separate administrative, legal and policy framework for strengthening the cooperative movement in the country.
- It will help deepen Co-operatives as a true people-based movement reaching up to the grassroots.
- It will work to streamline processes for 'Ease of doing business' for co-operatives and enable development of Multi-State Co-operatives (MSCS).

### Significance

- The formation of a new Ministry will help in restoring the importance of the cooperative structure in the country, which would be able to get a new lease of life.
- Under the new Ministry, the cooperative movement would get the required financial and legal power needed to penetrate into other states also.

## 4.8 INSOLVENCY and BANKRUPTCY CODE (IBC)

Why in News: The National Company Law Appellate Tribunal (NCLAT) has stayed the sale of the Videocon group of companies to Vedanta's Twin Star Technologies, under the Insolvency and Bankruptcy Code (IBC)



- In doing so, it stayed the approval granted by National Company Law Tribunal (NCLT) to the resolution plan submitted by Twinstar Technologies.
- The stay came on an appeal filed by dissenting creditors (who did not accept the resolution plan), Bank of Maharashtra and Industrial Finance Corporation of India (IFCI).

## **Insolvency and Bankruptcy Code**

- Over the years, many companies have repeatedly defaulted in loan repayment, which has led to huge bad debts in the banking system.
- The Insolvency and Bankruptcy Code was enacted to address this issue.

## **Key Provisions**

- The Insolvency and Bankruptcy Code (IBC), 2016 provides a time bound process for resolving insolvency in companies and also among individuals. Insolvency is a situation where individuals or companies are unable to repay their outstanding debt.
- If a default occurs, the IBC allows the creditors of the company or the company itself to initiate a corporate insolvency resolution process (CIRP) by filing an application before the National Company Law Tribunal (NCLT).
- CIRP is the process of resolving the corporate insolvency of a corporate debtor in accordance with the provisions of IBC.
- The National Company Law Tribunal is the adjudicating authority for insolvency resolution process of companies under the Insolvency and Bankruptcy Code.
- To ensure an uninterrupted resolution process, the Code also provides immunity to debtors from resolution claims of creditors during this period.
- Under IBC, insolvency proceedings can also be initiated against the personal guarantor of a corporate debtor. The personal guarantor provides a guarantee for the debt of a corporate debtor.

### **Resolution professional**

- Once the resolution process starts, the NCLT appoints an interim (temporary) resolution professional (IRP). The term of interim resolution professional continues till the appointment of the (regular) resolution professional.
- After the appointment of the IRP, the affairs of the corporate debtor (company in debt) are managed by the IRP.
- The IRP receives and collates the claims submitted by various creditors and constitutes a committee of creditors (CoC).



 After that the CoC can appoint the IRP as the resolution professional or replace him with another resolution professional.

## **Committee of Creditors (CoC)**

- Committee of Creditors (CoC) forms the decision-making body in the Corporate Insolvency Resolution Process (CIRP).
- As per IBC, only Financial Creditors can be a part of CoC. Operational creditors cannot be a part of CoC.
- Each Creditor can vote in accordance with the voting share assigned to it based on financial debts owed to the respective creditor.

## **Financial and Operational creditors**

- Financial creditors are basically entities (lenders like banks) that provide funds to the corporate entity. Their relationship with the entity is a pure financial contract, such as a loan or debt security.
- On the other hand, business and other entities that provide inputs and other materials and services and to whom the defaulted corporate entity owes a debt are called as operational creditors.

### **Resolution Plan**

- Once the IRP/RP collates and verifies the claims, the CoC invites proposals for resolution plans that could potentially be implemented.
- A resolution plan is a plan proposed for insolvency resolution of the corporate debtor. It
  may include provisions for the restructuring of the corporate debtor, through a merger,
  demerger etc.
- A resolution plan approved by 75% of the CoC, is then presented before the NCLT.

## **Approval of NCLT**

- If the NCLT approves the resolution plan, then it becomes binding on the corporate debtor and all the stakeholders.
- However, if the NCLT does not sanction the resolution plan or, the COC is unable to finalize a resolution plan in the designated period, then the tribunal orders the liquidation of the corporate debtor.

### Liquidation



- Liquidation is the process of bringing a business to an end by selling its assets.
- Liquidation value is the total value of company's physical assets, if the company goes out of business and its assets are sold.

#### Timeline of CIRP

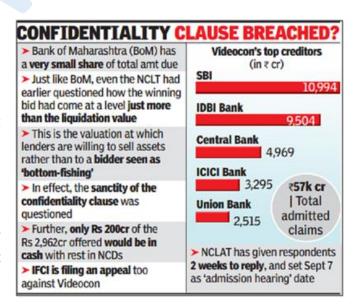
- The maximum time within which a corporate insolvency resolution process (CIRP) has to be mandatorily completed, including any extension, is 330 days.
- However, extension in the timeline can be granted by the NCLT, if parties are able to prove there is very little time left in the resolution process and the delay has been caused due to legal proceedings.

## **Background of the Videocon case**

- An insolvency resolution process has been going on against Videocon, for defaulting on the loans it had taken.
- In December, 2020, the committee of creditors (CoC) had approved Twin Star's resolution plan of around Rs 2,962 crore, for taking over all 13 group firms of Videocon, against admitted claims of Rs 64,838 crore by the lenders.
- Thus, Twin Star's resolution plan offered only 4.15% of the total outstanding claim, which meant creditors had to accept a loss of 95.85%.
- Twin Star's resolution plan was later approved by the NCLT, in June 2021. Though the NCLT had approved the resolution plan, it had expressed concern that Twin Star was paying "paying almost nothing", as it was offering only 4.15% of the total claim.

## **Doubts over confidentiality clause**

- As per regulations under IBC, the liquidation value is kept confidential and informed to the committee of creditors (CoC) only at the time of finalizing the resolution plan.
- Under IBC, the liquidation value is the value below which the lenders agree to sell the assets of the company rather than sell the company to the lowest bidder under the resolution process.
- In its decision, the NCLT had observed





that the amount offered by Twin Star (Rs 2,962 crore) was very close to the liquidation value of Videocon (Rs 2,568.13 crore).

• The NCLT expressed its doubts whether the confidentiality clause was followed in the Videocon resolution process. Therefore, the NCLT asked the Insolvency and Bankruptcy Board of India (IBBI) to examine whether the confidentiality clause was followed without any compromise in the current case.

## 4.9 NATIONAL LIVESTOK MISSION

Why in News: The Union Ministry of Fisheries, Animal Husbandry & Dairying has informed that the National Livestock Mission (NLM) proposes to bring sharp focus on entrepreneurship development and breed improvement in rural poultry, sheep, goat and piggery including feed and fodder development.

## **National Livestock Mission (NLM)**

- The National Livestock Mission launched in 2014-15, is an initiative of the Ministry of Agriculture and Farmers Welfare. The scheme is formulated for the development of livestock sector in India.
- **Objective:** To enhance the level of nutrition and standard of living of livestock keepers and farmers especially small holders through sustainable, safe and equitable livestock development.
- It is a centrally-sponsored scheme and is run as a sub-scheme under 'White Revolution'.

## **White Revolution**

The White Revolution in India, also known as Operation Flood, was launched in 1970s to make India a self-dependent country in milk production. Currently, India is the largest producer of milk in the world.

### **Functions of National Livestock Mission**

NLM broadly covers all the activities required to ensure quantitative and qualitative improvement in livestock production systems and capacity building of all stakeholders. The include:

- To reduce the gap in demand and availability of feed and fodder
- Conservation and improvement of indigenous breeds
- Higher productivity and production in a sustainable and environment friendly manner



- Enhanced livelihood opportunities, especially in rain-fed areas and for landless, small and marginal farmers
- Increased awareness, improved risk coverage and better availability of quality animal products to consumers
- Overall socio-economic upliftment of livestock rearers

#### Four sub-missions under National Livestock Mission

### **Sub-Mission on Livestock Development**

There are provisions for productivity enhancement including new innovative pilot projects for small ruminants, pigs and poultry, Entrepreneurship Development and Employment Generation (bankable projects), strengthening of infrastructure of state farms with respect to modernization, automation and bio-security, conservation of threatened breeds, minor livestock development, rural slaughter houses, fallen animals and livestock insurance.

## Sub-Mission on Pig Development in North-Eastern Region

- There has been persistent demand from the North Eastern States seeking support for allround development of piggery in the region.
- For the first time, under NLM a Sub-Mission on Pig Development in North-Eastern Region is provided wherein Government of India would support the State Piggery Farms, and import of germplasm so that eventually the masses get the benefit as it is linked to livelihood and contributes in providing protein-rich food in 8 NER States.

### **Sub-Mission on Fodder and Feed Development**

Address the problems of scarcity of animal feed resources, in order to give a push to the livestock sector making it a competitive enterprise for India, and also to harness its export potential.

## Sub-Mission on Skill Development, Technology Transfer and Extension

- The extension machinery at field level for livestock activities is very weak.
- As a result, farmers are not able to adopt the technologies developed by research institutions.
- The emergence of new technologies and practices require linkages between stakeholders and this sub-mission will enable a wider outreach to the farmers.

## **News Update**



National Livestock Mission (NLM) proposes to bring sharp focus on entrepreneurship development and breed improvement in rural poultry, sheep, goat and piggery including feed and fodder development through various programs:

- Rural Poultry Entrepreneurship component will give direct employment to 1.5 lakh farmers and 2 lakh farmers will be directly benefitted from sheep, goats and poultry development.
- Livestock Census & Integrated Sample Survey component will support states for undertaking Livestock Census and for bringing out production estimates of milk, meat, egg and wool which is crucial for formulating strategies for holistic development of livestock sector.
- Livestock Health and Disease Control will be implemented with the aim to reduce risk to animal health by prophylactic vaccination against diseases of livestock and poultry, capacity building of Veterinary services, disease surveillance and strengthening veterinary infrastructure.
- Under the scheme, during the next five years, Mobile veterinary clinics will be established in the country to deliver animal health services at doorstep of 10 crore farmers engaged in Animal Husbandry.
- Fodder and fodder seed availability in country will be increased by many folds through creation of fodder entrepreneurs.
- The dairy cooperatives and Farmer Producer Organisations engaged in dairy activities will be provided with 4% interest subvention for meeting their working capital requirements.
- Introduction of sex-sorted semen technology will further enhance productivity of bovines through production of only female calves with more than 90% accuracy.
- This will also help in managing of stray cattle by reducing number of male animals.



## **SCIENCE AND TECHNOLOGY**

- **❖** Paper III: The articles in this section are relevant to the following topics:
- Science and Technology- developments and their applications and effects in everyday life
- Achievements of Indians in science & technology; indigenization of technology and developing new technology.
- Awareness in the fields of IT, Space, Computers, robotics, Nano-technology, biotechnology and issues relating to intellectual property rights.
- Prelims



## **5.1 HOPE MISSION**

Why in News: The UAE's Hope spacecraft, which is orbiting Mars since February 2021, has captured images of glowing atmospheric lights in the Red Planet's night sky, known as "discrete auroras".

## **Hope Mission**

- The United Arab Emirates' Mars Mission called "Hope" was announced in 2015 with the aim of creating mankind's first integrated model of the Red planet's atmosphere.
- The Hope Orbiter was launched in July 2020, and reached the orbit of Mars on 9th February 2021.
- The overall life of UAE's Mars mission is around one Martian year i.e. 687 days on Earth.
- UAE became the fifth entity to successfully launch a space mission to Mars after USA, USSR, European Space Agency and India.
- With Tianwen-1 spacecraft successfully landing on Mars in May 2021, China has become the latest country to join the list.

## The primary objective of the mission is to study Martian weather dynamics.

- By correlating the lower atmosphere and upper atmosphere conditions, the probe will look into how weather changes the escape of hydrogen and oxygen into space.
- By measuring how much hydrogen and oxygen is spilling into space, scientists will be able to look into why Mars lost so much of its early atmosphere and liquid water.
- With the information gathered during the mission, scientists will have a better understanding of the climate dynamics of different layers of Mars' atmosphere.

### **Auroras**

- Auroras are shafts or curtains of coloured light visible on occasion in the night sky.
- The aurora often appears as curtains of lights, but they can also be arcs or spirals, often following lines of force in Earth's magnetic field.
- In the northern part, the polar lights are called Aurora Borealis or Northern Lights, and are seen from the US (Alaska), Canada, Iceland, Greenland, Norway, Sweden and Finland.





- In the southern part, they are called Aurora Australis or Southern Lights, and are visible from high latitudes in Antarctica, Chile, Argentina, New Zealand and Australia.
- Generally, the aurora is confined to the polar regions. But occasionally, the oval expands, and the lights become visible at lower latitudes.

**Auroras are result of collisions** between gaseous particles in the Earth's atmosphere with charged particles released from the Sun's atmosphere.

- Free electrons and protons are thrown from the Sun's atmosphere due to the rotation of the Sun and they escape through holes in the magnetic field through solar wind.
- Blown towards the Earth by the solar wind, the charged particles are largely deflected by the Earth's magnetic field.
- However, the Earth's magnetic field is weaker at either pole and therefore some particles
  enter the Earth's atmosphere and collide with gas particles. When the charged particles
  from the Sun strike atoms and molecules in Earth's atmosphere, they excite those atoms,
  causing them to light up.
- Different gases in Earth's atmosphere give off different colours when they are excited. Oxygen gives off the green colour of the aurora, for example. Nitrogen causes blue or red colours.
- Unlike Earth, which has a strong magnetic field, the Martian magnetic field has largely died out. This is because the molten iron at the interior of the planet Mars which produces magnetism has cooled down. However, the Martian crust still retains some magnetism.
- So, in contrast with Earth, which acts like one single bar magnet, magnetism on Mars is unevenly distributed, with fields strewn across the planet and differing in direction and strength.
- These disjointed fields channel the solar wind to different parts of the Martian atmosphere, creating "discrete" auroras over the entire surface of the planet. Studying Martian auroras is important for scientists, for it can offer clues as to why Mars lost its magnetic field and thick atmosphere—which are essential requirements for sustaining life.

## 5.2 ZIKA VIRUS

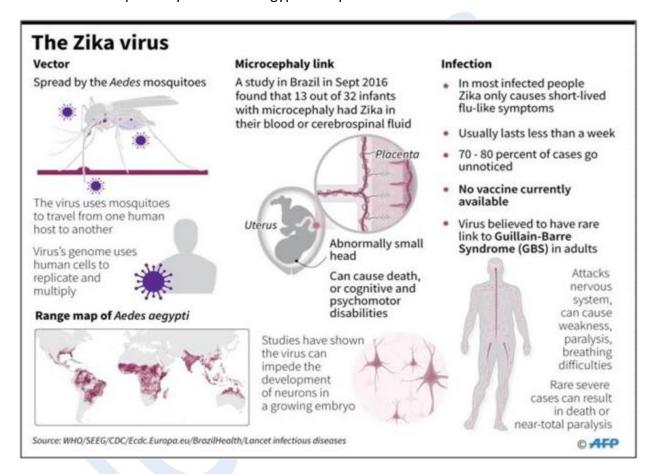
Why in News: Kerala is on alert after detecting at least 15 cases of the Zika virus. All the patients are being treatment and are in stable condition.

All district administrations have been told to keep a close eye on cases of mosquito bites, and conduct fumigation drives.



#### Zika virus

- Zika virus belongs to a group of viruses called the flavi-viruses, which includes dengue virus, West Nile virus and yellow fever virus.
- Zika virus infects and replicates inside the cells of several species, including humans, monkeys, and mosquitoes.
- Zika virus is spread by the Aedes aegypti mosquito.



- Zika virus disease, or Zika in short, is a viral infection.
- Most people infected with the virus do not develop symptoms. When they are manifested, the symptoms are similar to those of flu, including fever bodyache, headache etc. Additional symptoms can include rash and conjunctivitis.
- Generally, the virus is not considered dangerous to anyone other than pregnant women.
- Riskier for Pregnant women:
  - Pregnant women and their unborn fetuses are at higher risk for harmful effects from Zika.



- There is a link between Zika infection during pregnancy and a condition called microcephaly in newborns.
- Microcephaly is a condition in which babies are born with small and underdeveloped brains.
- Microcephaly may involve neurological problems or developmental delays.
- In some rare cases, it may be linked with Guillain-Barré syndrome, a neurological disorder that could lead to paralysis and death..

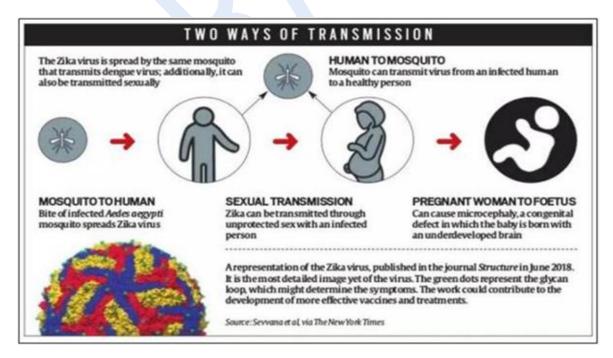
According to a study conducted in 2017, the fatality rate of the disease is about 8%.

#### **Transmission**

- The primary mode of Zika transmission is through mosquitoes in the genus Aedes, prominently Aedes aegypti mosquitoes, which bite during the day.
- Other modes of transmission include:
  - Pregnant woman who contracts Zika transmitting the virus to her growing fetus
  - Sexual contact or through blood transfusions from a Zika-infected donor

#### **Treatment**

- Zika has no treatment or vaccine.
- The symptoms of Zika virus are mild and usually require rest, consumption of plenty of fluids, and common pain and fever medicines.





### **5.3 DRONE REGULATION**

Why in News: The Ministry of Civil Aviation recently released The Drone Rules, 2021 for public consultation. The aviation ministry has sought public comments on the Drone Rules, till August 5, 2021.

### **Background**

- Drones now form a significant new consumer technology category, and are being tested for a range of practical as well as industrial uses such as automated package deliveries by ecommerce companies.
- The existing UAS Rules 2021, were considered restrictive, as it required a variety of mandatory approvals for operating drones in the country.
- In order to reform the drone regulations in the country, last month the Prime Minister also chaired a meeting of top ministers to discuss the policy regarding drones.

### **Drone Rules 2021**

- The objective of the rules is to enable more types of drone operational scenarios, increase the ease of compliance for the drone industry, and ensure safety and security.
- The drone rules are built on the basis of trust, self-certification and non-intrusive monitoring.

### **Key provisions of Drone Rules, 2021**

### **Drone Classification**

As per the Rules, drone is an aircraft that can operate autonomously (on its own) or can be operated remotely without a pilot on board. Drones will be classified based upon the maximum all-up weight including payload as follows:

- Nano drone: Less than or equal to 250 grams;
- Micro drone: Greater than 250 grams and less than or equal to 2 kilograms;
- Small drone: Greater than 2 kilograms and less than or equal to 25 kilogram;
- Medium drone: Greater than 25 kilograms and less than or equal to 150 kilogram; and
- Large drone: Greater than 150 kilograms.

Coverage of drones under the rules has been increased from 300 kg to 500 kg.

### **Process simplification**



- Many approvals that were required earlier for operating drones have been abolished under the new rules.
- These include the unique authorisation number, unique prototype identification number, certificate of conformance, certificate of maintenance, import clearance, operator permit, and student remote pilot licence.
- No security clearance is required before any registration or licence issuance.
- Number of forms required to operate forms has been reduced from 25 to 5.
- Further, there is no requirement of certificate of airworthiness, unique identification number and prior permission for Research & Development (R&D) entities.
- The new rules also prescribe an easier process for transfer and de-registration of drones.

### Provisions for training and pilot license

- All drone training and testing has to be carried out by an authorised drone school.
- The Directorate General of Civil Aviation (DGCA) will prescribe training requirements, oversee drone schools and provide pilot licences online.
- No pilot licence will be required for micro drones used for non-commercial use, nano drones and for R&D organizations operating such drones.

### **Rules for foreign drones**

- There will no longer be a ban on the use of drones by foreign-owned companies registered in India.
- Import of drones and drone components will be regulated by the Directorate General of Foreign Trade (DGFT).

### **Digital Sky Platform**

- The Digital Sky Platform is the national unmanned traffic management platform in India.
- The government will develop the Digital Sky Platform into a business friendly, single window online system, which manufacturers will be able to use for certification process.
- There will be minimal human interface on the digital sky platform and most permission will be self-generated. For example, a manufacturer may generate a drone's unique identification number on the digital sky platform through the self-certification route.

Moreover, an interactive airspace map with green, yellow, and red zones will be displayed on the digital sky platform.

### **Zone classification**



- As per drone regulations in India, the air space has been partitioned into three zones: Red, Yellow and Green.
- As per the new rules, in green zones, no flight permission will be required for operations up to 400 feet and up to 200 feet in the area between 8-12 km from an airport perimeter.
- To fly in the yellow zone, a drone pilot will require permission from the air traffic control authority.
- In red zones, drone operations shall be permitted only under exceptional circumstances by the central government.

#### **Drones to facilitate business**

The new rules contain provisions for drone taxis and drone corridors that will be developed for cargo deliveries. Further, a drone promotion council will be set up to facilitate a business-friendly regulatory regime.

### **Safety Features**

- Safety features like No Permission No Take-off (NPNT), real-time tracking, geo-fencing etc. will be notified in future.
- NPNT is a provision that requires an operator to take permission from DGCA, using the Digital Sky platform, before flying.
- As mentioned above, geo-fencing means restricting the movement of drone within a defined airspace.
- Users will be given a time frame of six months to comply with the safety features.

#### **Penalty**

Maximum penalty under new rules has been reduced to Rs 1 lakh. This shall, however, not apply to penalties in respect of violation of other laws.

### Impact of the new rules

- The new rules will make it significantly easier for people and companies to own and operate drones, by streamlining the certification process for manufacturers, importers and users.
- Drones are facilitating the next big technology revolution around the globe with reduced costs, resources and time taken for operations.
- The new rules will help the country to take advantage of these benefits offered by drones which include speed, safety, economy and reliability.
- It will go a long way to facilitate investments in drone technology in India, and give a boost to future of technology in the country.



### **5.4 UMANG APP**

Why in News: Recently, the Ministry of Electronics and Information Technology (MeitY), Government of India, has enabled map services in UMANG App through Memorandum of Understanding (MoU) with Map my India.

### The Unified Mobile Application for New-age Governance (UMANG) App

- The UMANG mobile application, an initiative of MeitY under the Digital India Program, was launched in
- It is a Government of India single, unified, secure, multi-channel, multi-service mobile app, providing access to high impact services of various organizations.
- It brings major government services on a single mobile app on the mobile phones of citizens (supporting 13 Indian languages and is available for Android, iOS and Windows).
- It was developed by MeitY with the National e-Governance Division (NeGP).
- NeGP is an initiative of the Government of India (consisting of 27 "Mission Mode Projects" (MMPs) and 8 components, approved on 18 May 2006) to make all government services available to the citizens of India via electronic media.
- NeGP was formulated by the Department of Electronics and Information Technology (Deity) and Department of Administrative Reforms and Public Grievances (DARPG). This is an enabler of Digital India initiative, and UMANG in turn is an enabler of NeGP.

### Objective of the UMANG app

- To act as an enabler and facilitator in developing the overall mobile based service delivery ecosystem in India.
- Provide easy access for individuals to various services via single Mobile Application.
- Provide easy discoverability of services, easy manageability and standardisation of service delivery.
- Provide for quick mobile enablement of e-Gov applications or services of Government departments through easy and fast integration, thus, facilitating easy on-boarding of Government departments.
- Provide other value-added services through integration with Telecom Service Provider and Payment gateway.

### Important services available on the UMANG app







### **News Update**

- As a result of integration of UMANG with MapmyIndia, citizens will be able to find government facilities nearest to their location (such as mandis, blood banks etc) at the click of a button.
- Besides, they will also be able to view the driving distance, get directions and turn by turn voice and visual guidance to locations, including traffic and road safety alerts during navigation.



- As of now, three services have been integrated in the map functionality of UMANG app Mera Ration for finding nearby fair price ration shops, eNAM for mandis and Damini
  Lightning Alerts for information on areas where lightning has struck in the last few minutes
  and alert for lightning strikes.
- The MeitY has taken various initiatives in the recent past to ease the lives of citizens by facilitating online delivery of Government services under the Digital India Program.

### 5.5 PEAGSUS

Why in News: Recently, it was reported that an Israeli spyware known as Pegasus has been used to spy on politicians, journalists and activists, in various countries, including India. This provides the context to understand the laws on surveillance in India.

### **Pegasus**

- Pegasus is a spyware and all spywares do what the name suggests they spy on people through their phones (or electronic devices).
- The stated aim of Pegasus is to fight crime and terrorism and developers of Pegasus claim that it is not a tool for mass surveillance.
- Pegasus can take multiple routes to reach a target's phone. Its earliest version used a link embedded in a message, customized to make the targeted person click the link. However, it has now evolved to include zero click attacks, where the target need not take any action for the phone to be infected.
- In 2019, WhatsApp shared that Pegasus could enter phones via calls made on the platform, even if they were not attended.
- Pegasus uses several such weaknesses to enter phones; and many of these exploits are zero day exploits, which means it is not a weakness that the device manufacturers are aware of.

Pegasus can also be delivered over the air from a nearby wireless transmitter, or manually inserted if the target phone is physically available.

Spying capabilities of Pegasus: Once inside the phone, Pegasus seeks root privileges.

Root privileges are a level of control over the phone that is beyond what a regular user has. It enables Pegasus to establish itself within the phone. It can then start transmitting any data stored on the phone to its command-and-control centers.

This level of control also means Pegasus can turn on the phone's cameras and microphones to turn it into a spying device without the owner's knowledge.



### **Clients of Pegasus**

- Developers of Pegasus officially claim that it has clients in 40 countries, though the company has not revealed their identities.
- It can only be sold to authorised government entities as per Israeli law and most reports suggest that the governments in these countries are the clients.
- In India, the government has neither confirmed nor denied that it has purchased the Pegasus software at any point of time.

### Pegasus' legality in India

According to experts, the use of Pegasus is illegal as it constitutes unauthorised access under Section 66 of the Information Technology Act.

Section 66 prescribes punishment to anyone who gains unauthorised access to computers and downloads, copies or extracts any data.

### Laws governing surveillance in India

The laws governing surveillance in India are the Indian Telegraph Act, 1885 and the Information Technology (IT) Act, 2000.

### Indian Telegraph Act, 1885

As per the Telegraph Act, the government can intercept a message or class of messages. This can be done in the interests of the sovereignty and integrity of India, the security of the State, friendly relations with foreign states or public order or for preventing incitement to offence.

Significantly, the above conditions are applicable only when there is a public emergency or in the interest of public safety. Additionally, it states that even this lawful interception cannot take place against journalists.

### IT Act, 2000

- The second law enabling surveillance is the Information Technology Act, 2000, which deals with electronic surveillance.
- The procedure for electronic surveillance authorised by Section 69 of IT Act, is detailed in the Information Technology (Procedure and Safeguards for Interception, Monitoring and Decryption of Information) Rules, 2009.



- Under Section 69 of the IT Act, all electronic transmission of data can be intercepted. So, for a Pegasus-like spyware to be used lawfully, the government would have to invoke both the IT Act and the Telegraph Act.
- In addition to the conditions for surveillance under the Telegraphy Act, Section 69 of the IT Act, allows interception, monitoring of digital information for the investigation of an offence.
- Significantly, it removes the condition under the Telegraph Act that requires the occurrence
  of public emergency or the interest of public safety, which widens the of powers under the
  law.

### **Supreme Court's interventions related to surveillance**

- In Public Union for Civil Liberties v Union of India (1996), the Supreme Court pointed lack of procedural safeguards in the provisions of the Telegraph Act.
- The court noted that authorities engaging in interception were not even maintaining adequate records on interception. Thus, the court laid down certain guidelines for interception.
- The Supreme Court's guidelines formed the basis of introducing Rule 419A in the Telegraph Rules in 2007 and later in the rules prescribed under the IT Act in 2009.
- Under Rule 419A, orders of interception have to be passed by the Home Secretary at the Central or State level.
- In unavoidable circumstances the orders can be cleared by a Joint Secretary or officers above, if they have the Home Secretary's authorisation.
- In the S. Puttaswamy vs Union of India (2017), the SC again underlined the need for safeguards under surveillance, stating that it should be legally valid and serve a legitimate aim of the government.
- The court also said the means adopted should be proportional to the need for surveillance, and there should be procedures to check any abuse of surveillance.



### **ECOLOGY and ENVIRONMENT**

- **❖** Paper III: The articles in this section are relevant to the following topics:
- Conservation, environmental pollution and degradation, environmental impact assessment
- Disaster and disaster management.
- Prelims Oriented Questions



### **6.1 CLOUDBURST**

Why in News: At least seven people were killed and 17 injured after a cloudburst hit remote Hunzar village, of the hilly Kishtwar district of Jammu and Kashmir.

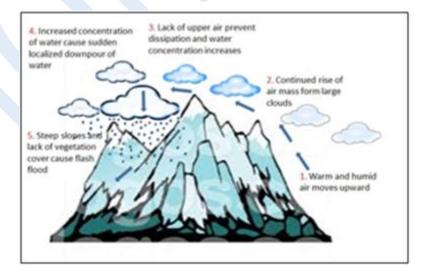
#### Cloudburst

- Cloudbursts are short-duration, intense rainfall events over a small area.
- A cloudburst is different from rain only in the amount of water that pours down on the earth.
- The India Meteorological Department (IMD) categorises rainfall over 100 mm/hour as cloudburst. Usually small areas; anywhere between 20-80 square kilometers are affected.
- Rainfall over 50 mm/hour is categorised as a mini-cloudburst.

### **Cloudburst process**

Cloudburst occurs when moisture-rich air travels up a mountainous region, forming a vertical column of clouds known as Cumulonimbus clouds. These clouds usually cause rain, thunder and lightning. This upward movement of clouds is also known as 'orographic lift'. Due to these unstable clouds, heavy rainfall may occur over a small area.

The upward movement of clouds provides the required energy for a cloudburst. It usually happens at 1,000-2,500 meters above the sea level. The moisture is usually provided by low-level eastern winds associated with a low-pressure system over the Gangetic plains.





### Role of topography

- The severity of cloudbursts differs based on terrain.
- A cloudburst usually occurs in high-altitude areas due to the formation of a low-pressure area on the top of a mountain.
- The low-pressure zone attracts clouds to the top of the mountain with great force.
- When they hit the peak, the moisture content is released in the form of rain.
- Large volumes of water gain momentum as it flows in gushes, resulting in landslides.
- In the plains, cloudbursts cause water logging and flash floods.

#### India's scenario

- In the Indian subcontinent, a cloudburst usually occurs when a monsoon cloud drifts northwards, from Bay of Bengal or Arabian Sea across the plains, then onto the Himalayas and bursts.
- The most disastrous cloudburst was report in India in the state of Uttarakhand in 2013 where more than 5,400 people were killed and 4,200 villages were affected.

### **Cloudbursts becoming more frequent**

- As per a report titled 'Assessment of Climate Change over India 2020' released by the Ministry of Earth Sciences, the Indian subcontinent, during the period of 1969-2015, experienced 130 mini-cloudburst events and one cloudburst event per year.
- Earlier, cloudbursts were common during monsoon or post-monsoon period, which is September-October. Now, they are occurring sooner every year. For example, the Uttarakhand floods (2013) caused by a cloudburst, occurred in the month of June.

### Cause

- The main reason behind increased frequency of cloudbursts is climate change.
- It has caused increased global temperatures and changes in wind pattern.
- As temperatures increase the atmosphere can hold more and more moisture and this moisture comes down as a very intense rainfall for a short duration, resulting in flash floods in the mountainous areas and urban floods in the cities.



### 6.2 CONSERVATION ASSURED TIGER STANDARDS

Why in News: 14 out of India's 51 tiger reserves have received the Conservation Assured Tiger Standards (CA|TS) accreditation for meeting a set of standards for effective conservation of big cats.

### **Conservation Assured Tiger Standards (CA|TS)**

- Conservation Assured (CA) is a conservation tool to set minimum standards for effective management of target species.
- The first species-specific CA standards were introduced for the tiger (Panthera Tigris) in 2013 known as Conservation Assured Tiger Standards (CA|TS).
- CA|TS is a set of best-practice standards which allows tiger sites to check if their management will lead to successful tiger conservation.
- It has been agreed upon as an accreditation tool by the global coalition of Tiger Range Countries (TRCs) and has been developed by tiger and protected area experts.

Objective: To support the conservation and recovery of tiger populations by improving the management of the areas where tigers live.

It is not a new management effectiveness system or a ranking of tiger conservation areas; but rather provides the means to tell if a particular area attains the minimum standards needed to conserve tigers.

Areas taking part in CA|TS will be either CA|TS Registered (but standard not yet attained) or CA|TS Approved (i.e., areas which have been assessed as achieving the standards). An approved site has achieved excellence in tiger site management.

### **Evaluation Process**

- Sites are evaluated through an assessment and independent review process. The review process starts with self-assessment, progresses through a system of national assessment and is finally approved by an international committee, which ensures equivalence across tiger range countries.
- CA|TS assessment is organised under seven pillars and 17 elements of critical management activity.
- The seven pillars include the importance and status of a reserve, management, community participation, tourism, protection, habitat management, and tiger populations.



### **Tiger Range Countries**



- The Tiger Range Countries (TRCs) are the countries where tigers still roam free i.e., in the wild.
- There are currently 13 such countries India, Bangladesh, Bhutan, Cambodia, China, Indonesia, Lao PDR, Malaysia, Myanmar, Nepal, Russia, Thailand and Vietnam.
- In the 2010 declaration (known as St Petersburg Declaration), all 13 countries, agreed to a Global Tiger Recovery Program and pledged to strive to double the number of tigers by 2022 by "doing everything possible to effectively manage, preserve, protect, and enhance habitats."

### India's scenario

- In 2010, India had 1,706 tigers. The population increased to 2,967 by 2018, according to the National Tiger Conservation Authority.
- NTCA is a statutory body, constituted under the Wildlife (Protection) Act, 1972.
- It conducts tiger census in India, every four years.

### **News Update**

The CA|TS accreditation has been granted to 14 reserves in India, and one each in Nepal, Bhutan, and Russia.



- The 14 reserves are Manas, Kaziranga, and Orang (Assam); Sundarbans (West Bengal); Valmiki (Bihar); Dudhwa (Uttar Pradesh); Panna, Kanha, Satpuda and Pench (Madhya Pradesh); Anamalai and Mudumalai (Tamil Nadu); Parambikulam (Kerala) and Bandipur (Karnataka).
- The Global Tiger Forum (GTF), an international NGO working on tiger conservation, and World Wildlife Fund India are the two implementing partners of the National Tiger Conservation Authority for CA|TS assessment in India.

### 6.3 ENVIRONMENTAL SUMMIT AT G20

Why in News: The two-day environment ministerial meet at the G20 Summit held in Naples, Italy concluded recently. The environmental meet, concluded without an agreement on a specific commitment related to the global temperature target.

#### **G20**

- The G20 (or Group of Twenty) is an international forum for the governments and central bank governors from 19 countries and the European Union (EU).
- Founded in 1999, with the aim to discuss policy related to the promotion of international financial stability, the G20 has expanded its agenda since 2008 and seeks to address issues that go beyond the responsibilities of any one organization.
- The 19 member countries are Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Mexico, Russia, Saudi Arabia, South Africa, South Korea, Turkey, United Kingdom and the United States.

### **News Update**

- At the G20 environment ministerial meet, India advised that the world should avoid shifting targets and setting new benchmarks for global climate action.
- India pointed that pledges made by some countries to achieve Net Zero GHG emissions or 'carbon neutrality' by mid-century were inadequate.
- Considering the rights of developing countries to economic growth, India urged the group of 20 developed nations (G20) with per capita GHG emissions above the world average to reduce the GHG levels by 2030.
- India would focus on implementing its plans through concrete actions domestically as well as globally via collaborations such as the International Solar Alliance (ISA) and the Coalition of Disaster Resilient Infrastructure (CDRI).
- India also shared that it will accelerate action on climate change only when there is enough support from developed countries covering finance and technology.



#### **Greenhouse Gases**

- Greenhouse gases (GHG) trap heat in the atmosphere and warm the planet.
- The most abundant greenhouse gases in Earth's atmosphere are Methane, Water Vapour, Carbon Dioxide, Nitrous Oxide, Ozone, Chlorofluorocarbons, Hydro-fluorocarbons.

#### **Net zero emissions**

- The Net Zero emissions refer to a situation where a country is able to remove at least as much carbon dioxide from the atmosphere as it is emitting.
- This can be done by increasing forest cover or through technologies such as carbon capture.
- Carbon capture and storage is the process of capturing and storing carbon dioxide (CO2) before it is released into the atmosphere.

### **Paris Agreement**

- The Paris Agreement is an international treaty on climate change, adopted in 2015, that covers climate change mitigation, adaptation, and finance.
- Its goal is to limit global warming by 2100, to well below 2 degrees Celsius and preferably below 1.5 degrees Celsius, compared to pre-industrial levels. Doing this, would substantially reduce the impacts of climate change.
- As of July 2021, 191 members of the United Nations Framework Convention on Climate Change (UNFCCC) are parties to the Paris agreement.
- Nationally determined contributions (NDCs) are at the heart of the Paris Agreement and the achievement of these long-term goals. NDCs embody efforts by each country to reduce national emissions and adapt to the impacts of climate change.
- The Paris Agreement requires each Party to prepare, communicate and maintain successive NDCs.

### **National Determined Contributions (NDCs)**

- Countries periodically submit their National Determined Contributions (NDC) that outline their plans towards reducing emissions.
- As per the NDCs submitted to UNFCCC under Paris Agreement, the pledge of the United States falls short of their fair share by 12 tons of CO2/capita, of UK by 14.1 tones CO2/capita, of China by 0.2 tons CO2/capita, and of India by 0.4 tons CO2/capita.
- The fair share represents the reductions countries must achieve to ensure that the greenhouse gas levels are at a level, that prevents a 1.5°C average temperature rise by 2100.





### India's NDCs

### India's NDCs require it to achieve three main goals

- Increasing cumulative electricity generation installed capacity from non-fossil sources of energy to 40% by 2030.
- Reduce the emissions intensity of its GDP by 33 to 35 percent by 2030, compared to 2005 levels. Emissions intensity is the level of GHG emissions per unit of economic activity.
- Create additional carbon sink of 2.5 to 3 billion tons through additional forest and tree cover.

#### **CDRI** and ISA

- The Coalition for Disaster Resilient Infrastructure (CDRI) is an international coalition that aims to promote disaster-resilient infrastructure.
- The International Solar Alliance (ISA) is an alliance of 121 countries initiated by India. The primary objective of the alliance is to work for efficient consumption of solar energy to reduce dependence on fossil fuels.

### 6.4 MICROPLASTIC RIVER POLLUTION

Why in News: According to a study, conducted by an NGO, river Ganga is heavily polluted with microplastics at Varanasi, Haridwar and Kanpur.

### **Microplastics**

- According to the U.S. National Oceanic and Atmospheric Administration (NOAA), microplastics (defined as synthetic solid particles) are fragments of any type of plastic sized ranging 1 micrometre (µm) to 5 millimetre (mm) in length, which are insoluble in
- They enter natural ecosystems from a variety of sources, including cosmetics, clothing and industrial processes.

Primary microplastics include any plastic fragments or particles that are already 5.0 mm in size or less before entering the environment. These include microfibers from clothing, micro beads, and plastic pellets.

Secondary microplastics arise from the degradation (breakdown) of larger plastic products through natural weathering processes after entering the environment. These include water and soda bottles, fishing nets, etc.



Both types are recognized to persist in the environment at high levels, particularly in aquatic and marine ecosystems. However, microplastics also accumulate in the air and terrestrial ecosystems.

### Threats to ecosystem

- In marine ecosystems, microplastics, if ingested in marine organisms, can cause toxicity through various means.
- Not only microplastics are themselves toxic, they also have a tendency to absorb various toxins present in water, including harmful chemicals.
- Previous studies say that over 663 marine species (in India) are affected adversely due to marine debris and 11% of them are said to be related to micro plastic ingestion alone.
- In terrestrial ecosystems, microplastics have been demonstrated to reduce the viability of soil ecosystems and reduce weight of earthworms.
- On human health, microplastics could have a serious impact, considering their property to absorb toxic pollutants. Because plastics degrade slowly (often over hundreds to thousands of years), microplastics have a high probability of ingestion, incorporation and accumulation in the body tissues.

The toxic chemicals that come from both the ocean and runoff can also bio-magnify up the food chain.

### **News Update**

Recently, the findings were published of a study - Quantitative analysis of Microplastics along River Ganga, based on an analysis of water samples at Haridwar, Kanpur and Varanasi, was conducted in collaboration with the National Institute of Oceanography (NIO, Goa)

### Findings of the study

Reasons for micro plastic pollution: It indicates that municipal and industrial discharges are responsible for microplastics pollution in the river water.

- The pollution becomes more prominent in Kanpur and Varanasi, which may be due to discharge from tanneries and other industries like textiles, etc.
- Highest concentration: The highest concentration of such plastic was found at Varanasi,
   comprising single-use and secondary plastic products.



- Presence of different kinds of microplastics: The results show presence of at least 40 different kinds of polymers as microplastics. Micro beads were observed in Varanasi and Kanpur.
- Micro beads are manufactured solid plastic particles of less than one millimeter in their largest dimension.
- Micro beads are most frequently made of polyethylene but can be of other petrochemical plastics such as polypropylene and polystyrene.

**Ganga - a carrier of microplastics:** The study also shows that the river is acting as a carrier of plastics and microplastics and transporting significantly large quantities into the ocean.

### **Recommendations of the study**

- More studies of impact on human health are needed: Microplastics and their impact on marine bodies and the environment is documented through various research studies. But there is hardly any work for assessing their impact on human health.
- Strengthen the Extended Producer Responsibility (EPR): The EPR in the Plastic Waste Management Rules, 2016, which put the onus of plastic waste management on the producers or the companies manufacturing the products, needs to be strengthened.
- It also pushes the argument that rivers should be declared as 'no plastic zones'.
- Bring various stakeholders on board: Various stakeholders, including industry, the government and civil society organizations, need to join hands for improving plastic waste management and the subsequent reduction in micro plastic pollution.

### 5.5 UNESCO GREAT BARRIER REEF

Why in News: Recently, a UNESCO committee has recommended to place the world heritage site of 'The Great Barrier Reef' in the "in-danger" list of heritage sites. The Great Barrier Reef has lost half of its corals since 1995.

#### **Great Barrier Reef**

- It is the world's largest coral reef system (built by billions of tiny organisms, known as coral polyps), located in the Coral Sea, off the coast of Queensland, Australia.
- It can be seen from outer space and is the world's biggest single structure made by living organisms.
- It supports a wide diversity of life and was selected as a World Heritage Site in 1981.



- Though a large part of the reef is protected by the Great Barrier Reef Marine Park, the reef
  has lost more than half its coral cover since 1985.
- Environmental pressures on the reef and its ecosystem include runoff, climate change accompanied by mass coral bleaching, dumping of dredging sludge and cyclic population outbreaks of the crown-of-thorns starfish.

### **News Update**

- The UNESCO's heritage committee periodically reviews various heritage sites, and also evaluates new sites to be added to its more than 1,100 World Heritage list.
- Some UNESCO experts have argued that the loss is due to pollution run-off, indicating shortcomings in Australia's efforts to protect the site.
- Australia has strongly opposed the move to put the site in "in-danger" list, as it held global warming for the loss of corals in the Reed, as opposed to pollution run-off.
- With China being part of the committee, the Australian government has alleged that China is pressing to have the Barrier Reef listed as "in danger" due to the recent strain in the Australia-China relationship.

### **World Heritage Sites**

A World Heritage Site (WHS) is a landmark or area with legal protection by an international convention administered by the United Nations Educational, Scientific and Cultural Organization (UNESCO World Heritage Convention, established in 1972).

These sites are designated by UNESCO for having cultural, historical, scientific or other forms of significance. The sites, classified as cultural, natural and mixed (meeting both cultural and natural criteria) heritage around the world, are considered to be of outstanding value to humanity.

### Selection criteria

- To be selected, a World Heritage Site must be a somehow unique landmark which is geographically and historically identifiable and has special cultural or physical significance. For example, World Heritage Sites might be ancient ruins or historical structures, buildings, cities, deserts, forests, islands, lakes, monuments, mountains or wilderness areas.
- Demarcation of sites: These sites are demarcated by UNESCO as protected zones and the list is maintained by the international World Heritage Program administered by the UNESCO World Heritage Committee (composed of 21 "states parties", elected by UNESCO General Assembly).



- The World Heritage Program began with the Convention Concerning the Protection of the World's Cultural and Natural Heritage, adopted by the General Conference of UNESCO on 16 November 1972.
- Since then, 193 states parties have ratified the convention, making it one of the most widely recognised international agreements and the world's most popular cultural program

Number of such sites (as of June 2020): A total of 1,121 World Heritage Sites (869 cultural, 213 natural and 39 mixed) exist across 167 countries. With 55 selected areas each, China and Italy are the countries with the most sites on the list.

- Presently, there are 38 World Heritage Sites located in India (out of these, 30 are cultural, 7
  are natural and 1 is mixed).
- Importance: The sites are intended for practical conservation for posterity, which otherwise
  would be subject to risk from human or animal or threat from local administrative
  negligence.

**World Heritage Sites in 'Danger':** Under the 1972 World Heritage Convention, a World Heritage site can be inscribed on the List of World Heritage in Danger by the World Heritage Committee, if it is threatened and for the conservation of which assistance has been requested.

- The list is intended to increase international awareness of the threats and to encourage counteractive measures.
- Threats to a site can be either proven imminent threats or potential dangers that could have adverse effects on a site.

### **5.6 FORESTS ACT 2006**

Why in News: A "Joint Communication" was signed by the Ministry of Environment, Forest and Climate Change (MoEFCC) and the Ministry of Tribal Affairs (MoTA) to secure the rights of traditional forest dwellers and proper implementation of the Forest Rights Act, 2006.

### **Historical background**

- In the colonial era, the British diverted abundant forest wealth of the nation to meet their economic needs.
- While procedure for settlement of rights was provided under statutes such as the Indian Forest Act, 1927, these were hardly followed.
- As a result, tribal and forest-dwelling communities continued to live inside the forests in tenurial insecurity, a situation which continued even after independence as they were marginalised.



• The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, was enacted to protect the marginalised socio-economic class of citizens and balance the right to environment with their right to life and livelihood.

### Forest Rights Act, 2006

The Forest Rights Act (FRA), 2006 recognizes the rights of the forest dwelling tribal communities and other traditional forest dwellers to forest resources, on which these communities were dependent for a variety of needs, including livelihood, habitation and other socio-cultural needs.

### **Objectives**

- To undo the historical injustice occurred to the forest dwelling communities.
- To ensure land tenure, livelihood and food security of the forest dwelling Scheduled Tribes and other traditional forest dwellers.
- To strengthen the conservation regime of the forests by including the responsibilities and authority on Forest Rights holders for sustainable use, conservation of biodiversity and maintenance of ecological balance.

### Rights of forest dwellers get under the Act

### The Forest Rights Act, 2006 recognises three types of Rights

### **Land Rights**

- The Act gives the forest dwellers the right to ownership to land farmed by them, subject to a maximum of 4 hectares per family.
- Ownership is only for land that is actually being cultivated by the concerned family and no new lands can be granted.
- The land cannot be sold or transferred to anyone except by inheritance.

### **Use Rights**

- The rights of the dwellers extend to extracting Minor Forest Produce (such as tendu patta, herbs, medicinal plants etc.), grazing areas, to pastoralist routes, etc.
- Minor forest produce does not include timber.

### **Right to Protect and Conserve**

The Act gives the forest dwelling communities the right to protect and manage the forest.



• This is vital for the thousands of village communities who are protecting their forests and wildlife against threats from forest mafias, industries and land grabbers.

Members or community of the Scheduled Tribes who primarily reside in and who depend on the forests or forest lands for bona fide livelihood needs. It can also be claimed by any member or community who has for at least three generations (75 years) prior to 13thDecember, 2005primarily resided in forests land for bona fide livelihood needs.

Section 6 of the Forest Rights Act, 2006 provides a transparent three step procedure for deciding on who gets rights:

- Gram Sabha makes a recommendation i.e. who has been cultivating land for how long, which minor forest produce to be collected, etc.
- The Gram Sabha's recommendation goes through two stages of screening committees at the Taluka and District levels.
- The District Level Committee makes the final decision. The committees have six members: three government officers and three elected persons.

#### **Gram Sabha**

Gram Sabha is a body consisting of all persons whose names are included in the electoral rolls for the Panchayat at the village level. The term is defined in the Constitution of India under Article 243(b).

### **News Update**

- The Joint Communication signed by the Union Ministry of Environment, Forest and Climate Change (MoEFCC) and the Ministry of Tribal Affairs (MoTA) has been addressed to all Chief Secretaries of States and UTs, specifically looking at harnessing the potential for livelihood improvement of the Forest dwellers as well as community participation in forest conservation.
- The Joint Communication mentions that tribals and other forest dwellers can contribute significantly in efforts towards climate change through preservation of biodiversity, environmental conservation and enhancing forest cover.
- The document highlights that forest area planning should be done in consultation with Gram Sabhas and they should be made an integral part of afforestation endeavours.
- Forest Departments of state governments have been directed to carry out verification of claims for forest rights, mapping of forest lands involved and provision of necessary evidence as required, authentication of records, joint field inspections, awareness generation, etc.



### **SOCIAL ISSUES**

- **❖** Paper I: The articles in this section are relevant to the following topics:
- Salient features of Indian Society, Diversity of India.
- Role of women and women's organization, population and associated issues, poverty and developmental issues, urbanization, their problems and their remedies.
- Effects of globalization on Indian society
- Social empowerment, communalism, regionalism & secularism.



### 7.1 UNITED INFORMATION SYSTEM FOR EDUCATION PLUS (UDISE+)

Why in News: Recently, the Ministry of Education, Government of India, released the Report on United Information System for Education Plus (UDISE+) 2019-20 for School Education in India.

### The Unified District Information System for Education (UDISE)

- Initiated in 2012-13 by the Department of School Education and Literacy, Ministry of Education, Government of India, UDISE is one of the largest Management Information Systems on School Education.
- It integrates the District Information System for Education for elementary and secondary education.
- It covers more than 1.5 million schools, more than 9.6 million teachers and more than 264 million children.
- UDISE+ is an updated and improved version of UDISE, developed in the year 2018-19, with online data collection from the schools, to overcome the issues related to manual data filling.
- Inclusion of name of a school in any of the lists in the UDISE+ does not confer the status of recognition to the school by the Ministry of Education, Government of India.

**Significance:** The establishment of a well-functioning and Sustainable Educational Management Information System is of utmost importance today, as the timely and accurate data is the basis of sound and effective planning and decision-making.

### **Highlights of Report on UDISE+ 2019-20**

- The present publication relates to UDISE+ data for the reference year 2019-20.
- Total students in school education: Total students from pre-primary to higher secondary have crossed 26.45 crore, higher when compared to 2018-19.

**Gross Enrolment Ratio (GER):** GER is the total enrolment in a particular level of school education (regardless of age), expressed as a percentage of the Population of the official agegroup which corresponds to the given level of school education in a given school year.

For example, GER primary = Enrolment in class 1 to  $5 \div$  projected population in age group 6-10 years. GER at all levels of school education has improved in 2019-20 compared to 2018-19.

• GER increased to 89.7% at Upper Primary level, 97.8% at Elementary Level, when compared to 2018-19 data.



- GER has improved by nearly 10% in secondary between 2012-13 (68.7) and 2019-20 (78%).
- GER has improved by more than 11% in higher secondary schools between 2012-13 (40.1%) and 2019-20 (51.4%).

**Teachers:** 87 lakh teachers have been engaged in school education, which is higher when compared to 2018-19.

**Pupil Teacher Ratio (PTR):** PTR is the average number of pupils (at a specific level of education) per teacher (teaching at that level of education) in a given school- year. It has improved at all levels of school education. The PTR for primary school education has become 26.5, for upper primary and secondary has become 18.5 and for higher secondary has become 26.1.

**Enrolment of Divyang students:** Enrolment of Divyang students has increased by 6.52% over 2018-19, ensuring universal accessibility of education for persons with disabilities.

**Enrolment of girls:** In 2019-20, enrolment of girls from primary to higher secondary is more than 12.08 crore, an increase by 14.08 lakh compared to 2018-19.

GER of girls has increased to 90.5% at Upper Primary level, 98.7% at Elementary Level, 77.8% (68.2% in 2012-13) at Secondary Level and 52.4% (39.4% in 2012-13) at Higher Secondary Level in 2019-20 (from 2018-19).

Between 2012-13 and 2019-20, the GER for girls at both secondary and higher secondary level has increased more than that of the boys.

### Gender Parity Index (GPI): GPI is the ratio of GER of girls to GER of boys.

- It measures the progress towards gender parity in education participation and/or learning opportunities available for girls in relation to those available to boys.
- It also represents the level of girls' empowerment in the society.
- Between 2012-13 and 2019-20, the GPI at both Secondary and Higher Secondary levels have improved.
- Improvement of GPI has been most pronounced at the higher secondary level (1.04 in 2019-20 from 0.97 in 2012-13).

#### **Facilities in Schools**

More than 80% of schools in India in 2019-20 had functional electricity, an improvement over the previous year.

Number of schools having functional computers increased (to 5.2 lakh) in 2019-20. Also, the number of schools having internet facility increased (to 3.36 lakh) in 2019-20.



- More than 90% of schools in India had hand wash facility in 2019-20 (major improvement - only 36.3% in 2012-13).
- More than 82% schools conducted medical check-ups of students in 2019-20.
- More than 84% schools in India had a library or reading room or reading corner in 2019-20.

### 7.2 CHILD SOLDIERS PREVENTION LIST (CSPA)

Why in News: The U.S. has put Pakistan, Turkey and 13 other countries to a 'Child Soldier Recruiter List' under the Child Soldiers Prevention Act (CSPA).

The list identifies foreign governments having government-supported armed groups that recruit or use child soldiers.

### **Child solider**

- Child soldiers are any children under the age of 18 who are recruited by a state or non-state armed group and used as fighters, cooks, suicide bombers, human shields, messengers, spies, or for sexual purposes.
- The recruitment or use of children as soldiers is prohibited by both the UN Convention on the Rights of the Child (CRC) and the additional protocols to the Geneva Conventions.
- It is considered a war crime under the Rome Statute of the International Criminal Court.
- The UN verified that over 7,000 children had been recruited and used as soldiers in 2019 alone.

### **US Child Soldiers Prevention Act (CSPA)**

- The US Child Soldiers Prevention Act (CSPA) requires the publication in the annual Trafficking in Persons (TIP) report, a list of foreign governments that have recruited or used child soldiers during the previous year (April 1, 2020, to March 31, 2021).
- The countries which have been added to the annual TIP list of the US State Department this year are:
- Pakistan, Turkey, Afghanistan, Myanmar, Democratic Republic of the Congo, Iran, Iraq, Libya, Mali, Nigeria, Somalia, South Sudan, Syria, Venezuela and Yemen.
- The CSPA, which went into effect in 2009, prohibits the US government from providing military assistance to countries identified as having government or government-supported forces that recruit and use child soldiers.
- The countries will also not be eligible for the US Department of Defence's "train and equip" authority for building the capacity of foreign defence forces.



• **Exception:** The statute allows the US President to issue a "national interest waiver" for countries even if they are in violation of the Act.

### **UN Convention on the Rights of the Child (CRC)**

- The United Nations Convention on the Rights of the Child is an international human rights treaty which sets out the civil, political, economic, social, health and cultural rights of children.
- The UN General Assembly adopted the Convention and opened it for signature in 1989. It is the most widely ratified human rights treaty in history.
- The CRC requires state parties to take all feasible measures to ensure that children under 18 are not engaged in direct hostilities.
- The UN Committee on the Rights of the Child, composed of 18 independent experts, is responsible for supervising the implementation of the Convention by the states that have ratified it.
- In 2000, the Committee adopted the Optional Protocols to the Convention on the Rights of the Child on the involvement of children in armed conflict.
- While the CRC requires states to refrain from using children under 15 in direct hostilities, the Optional Protocol raised this age to 18. The CRC has been ratified by all members of the UN except for the United States.

#### **India's Scenario**

- India ratified the UN Convention on the Rights of the Child in 1992, agreeing in principle to all articles but with certain reservations on issues relating to child labor.
- The Child Labour (Prohibition and Regulation) Act, 1986 designates a child as a person who has not completed 14 years of age.
- The Act prohibits the employment of adolescents in the age group of 14 to 18 years in hazardous occupations and processes and regulates their working conditions where they are not prohibited.

### 7.3 NIPUN BHARAT PROGRAM

Why in News: Recently, the Union Minister for Education launched a National Initiative for Proficiency in Reading with Understanding and Numeracy (NIPUN) Bharat Program. The NIPUN Bharat program is aimed at universal foundational literacy and numeracy by the end of Grade 3.

### **Background**



The National Education Policy (NEP) 2020 has laid down that attaining foundational literacy and numeracy for all children must become an immediate national mission.

### National Initiative for Proficiency in Reading with Understanding and Numeracy (NIPUN) Bharat Program

- The program was launched by the Department of School Education, Ministry of Education, and Government of India.
- Central Square Foundation, a non-governmental organisation with a focus on foundational literacy and numeracy, has provided inputs and technical support to the Centre in the development of this mission.
- The program has been launched under the aegis of the centrally sponsored scheme of Samagra Shiksha and it will be funded through Samagra Shiksha itself.
  - Samagra Shiksha an overarching program extending from pre-school to class 12, has been prepared with the broader goal of improving school effectiveness (equal opportunities and equitable learning outcomes).

### **Objective**

- It aims to cover the learning needs of children in the age group of 3 to 9 years and will ensure that every child in this age group necessarily attains foundational literacy and numeracy by the end of Grade 3, by 2026-27.
- It will also focus on teacher capacity building, development of high quality and diversified Student and Teacher Resources or Learning Materials and tracking the progress of each child in achieving learning outcomes.

Annual Status of Education Report (ASER) found that less than 30% of Class 3 students could read at Class 2 level or do double digit subtraction in 2018.

Outcomes envisaged from implementation of the goals and objectives of NIPUN Bharat Mission: The unique feature is that the goals of the Mission are set in the form of Targets (based on the NCERT's and international research and studies) for Foundational Literacy and Numeracy. Outcomes -

- Reducing the dropouts and improving transition rate from primary to upper primary and secondary stages.
- Activity based learning and a conducive learning environment will improve the quality of education.
- Innovative pedagogies such as toy-based and experiential learning, thereby making learning a joyful and engaging activity.



- Intensive capacity building of teachers will make them empowered and provide greater autonomy for choosing the pedagogy.
- Holistic development of the child by focusing on different domains of development like physical and motor development, socio-emotional development, literacy and numeracy development, etc.
- Children to achieve a steeper learning trajectory which may have positive impacts on later life outcomes and employment.
- Since almost every child attends early grades, therefore it will also benefit the socioeconomic disadvantageous group thus ensuring access to equitable and inclusive quality education.

### **Significance**

- **Break from the past:** Unlike, simply enrolling children in school and then ensuring that they finish Class 10, the mission specifies stage-wise learning goals to ensure that students are acquiring the necessary building blocks.
- Foundational education is the core component of quality education: Quality education is the bedrock of strong Nation building and foundational education in literacy and numeracy skills is its core component.
- Making students globally competitive: NIPUN Bharat will not only help Indian students to take a big leap in their higher classes, but it will also have a major impact in making our students globally competitive.
- Flexible and collaborative implementation: The mission also covers key administrative aspects for effectively setting up an implementation mechanism at the National, State, District, Block and School level.

### Issues

**Pushed back the target:** Although the NEP had included a 2025 deadline to achieve the goal, the Centre has pushed back the target date to 2026-27, given that COVID-19 has already disrupted two academic years.

**No additional funding is being allocated**: For the NIPUN Bharat program money is being allocated from the flagship Samagra Shiksha scheme, which actually saw a 20% drop in its budget this year.



### **MISCELLANEOUS**

### > Telangana's Ramappa temple inscribed as a World Heritage Site

In a major diplomatic triumph for India, the 13th century Ramappa temple in Palampet, Telangana, was inscribed as a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site

### Kakatiya Rudreshwara (Ramappa) Temple

- Rudreshwara, popularly known as Ramappa Temple, is located in the village of Palampur approximately 200km north-east of Hyderabad, in the State of Telangana.
- It is the main Shiva temple (worshipped as Lord Ramalingeswara) in a walled complex and was built during the period of Kakatiya (1123–1323 CE) ruler Ganapati Deva by his General Recherla Rudra
- The sandstone temple, whose construction began in 1213 CE, is located close to the shores of the Ramappa Cheruvu, a Kakatiya-built water reservoir.
- The temple's sculptures of high artistic quality illustrate regional dance customs and Kakatiyan culture.
- It features decorated beams and pillars of carved granite and dolerite with a distinctive and pyramidal Vimana (horizontally stepped tower).
- Due to all this, Marco Polo, an Italian traveler, during his visit to the Kakatiya Empire, allegedly called the temple "the brightest star in the galaxy of temples".
- Some of the iconography on the temple was damaged during the invasion of Malik Kafur in 1310. The temple was also damaged by an earthquake in the 17th century and the one which struck in 1819.

### **UNESCO World Heritage Sites**

- A World Heritage Site (WHS) is a landmark or area with legal protection by an international convention administered by the UNESCO under the UNESCO World Heritage Convention, established in 1972.
- These sites are designated by UNESCO for having cultural, historical, scientific or other forms of significance.
- The sites, classified as cultural, natural and mixed (meeting both cultural and natural criteria) heritage around the world, are considered to be of outstanding value to humanity.



### Selection criteria

- To be selected, a World Heritage Site must be a somehow unique landmark which is geographically and historically identifiable and has special cultural or physical significance.
- For example, World Heritage Sites might be ancient ruins or historical structures, buildings, cities, deserts, forests, islands, lakes, monuments, mountains or wilderness areas.
- Demarcation of sites: These sites are demarcated by UNESCO as protected zones and the list is maintained by the international World Heritage Program administered by the UNESCO World Heritage Committee (composed of 21 "states parties", elected by UNESCO General Assembly).
- The World Heritage Program began with the Convention Concerning the Protection of the World's Cultural and Natural Heritage, adopted by the General Conference of UNESCO on 16 November 1972.

Since then, 193 states parties have ratified the convention, making it one of the most widely recognized international agreements and the world's most popular cultural program.

Number of such sites: A total of 1,121 World Heritage Sites (869 cultural, 213 natural and 39 mixed) exist across 167 countries.

- With 55 selected areas each, China and Italy are the countries with the most sites on the list.
- Presently, there are 39 World Heritage Sites (including Ramappa temple) located in India (out of these, 30 are cultural, 7 are natural and 1 is mixed).

Importance: The sites are intended for practical conservation for posterity, which otherwise would be subject to risk from human or animal or threat from local administrative negligence.

### **United Nations Educational, Scientific and Cultural Organization (UNESCO)**

- Founded in 1945 as the successor to the League of Nations' International Committee on Intellectual Cooperation, UNESCO is a specialized agency of the United Nations (UN), headquartered at the World Heritage Centre in Paris, France.
- It is aimed at promoting world peace and security through international cooperation in education, the sciences, and culture.
- It has 193 member states and 11 associate members as well as partners in the nongovernmental, intergovernmental and private sector.



### Istanbul Convention on Violence Against Women

- The Council of Europe Convention on preventing and combating violence against women and domestic violence, better known as the Istanbul Convention, is a human rights treaty of the Council of Europe.
- The Council of Europe (CoE) is an international organisation founded in the wake of World War II (in 1949) to uphold human rights, democracy and the rule of law in Europe.
- It has 47 member states and the organisation is distinct from the 27-nation European Union (EU).
- The CoE is an official United Nations Observer and no country has ever joined the EU without first belonging to the CoE.

**First legally- binding instrument:** Opened for ratification in May 2011 in Istanbul, Turkey (the Convention came into force on 1 August 2014), the convention is the first legally- binding instrument that creates a framework to combat violence against women.

**Objective:** It aims to prevent and prosecute all forms of violence against women, promoting gender equality and ensuring protection and rehabilitation of women who are victims of violence.

**Members:** As of March 2019, it has been signed by 45 countries and the EU. From the EU, 34 countries signed this treaty.

- On November 24, 2011, Turkey became the first country to ratify the Istanbul convention and on March 8, 2012, it incorporated the Istanbul Convention into domestic law.
- In 2021, Turkey became the first and only country to withdraw from the convention, after denouncing it on 20 March 2021. The convention ceased to be effective in Turkey on 1 July 2021, following its denunciation.

### > RE-Wilding

The recent attempt of Periyar Tiger Reserve (Kerala) to reintroduce into the wild an abandoned nine-month-old tiger cub (named Mangala) has once again brought the controversial concept of 're-wilding' under the lens.

'Re-wilding'



Three ways to deal with orphaned or abandoned tiger cubs: As per the National Tiger Conservation Authority (NTCA) guidelines laid down under the Wildlife Protection Act, 1972, there are three ways to deal with orphaned or abandoned tiger cubs.

- To make an effort to reunite the abandoned cubs with their mother.
- If a reunion of the cub with its mother is not possible, then shift the cub to a suitable zoo.
- Reintroduction of the cub into the wild after a certain time (in captivity) when it appears that the cub is capable of surviving in the wild independently. This is what is known as 're-wilding'.

### Various conditions to be complied before re-wilding

- NTCA stresses that the tiger cub should be reared in an in-situ enclosure for a minimum of two years.
- During this time, each cub should have a successful record of at least 50 kills.
- The persons responsible for handling cubs must approach them by putting a tiger mask along with clothes of a tiger stripe pattern.
- The tiger cubs should be in prime health and of dispersing age (three or four years).
- There should be no abnormality or incapacitation.
- Re-wilding is not limited to cats. There have been efforts to reintroduce other endangered species, including scavengers into the wild after rearing them in captivity.
- For example, the Bombay Natural History Society (BNHS) in collaboration with the Haryana Forest and Wildlife Department has been running a vulture conservation centre named 'Jatayu' near Pinjore.
- Several pairs of endangered vulture species, including the white-backed, the long-billed, and the slender-billed, have been successfully introduced into the wild.

#### Dholivira

The Indus Valley Civilisation (IVC) site of Dholavira in Gujarat got inscribed in the UNESCO world heritage site list.

- Dholavira became the fourth site from Gujarat and 40th from India to make the list.
- It is the first IVC site in India to get the tag.

**Indus Valley Civilisation (IVC)** 



- The IVC, also known as the Indus Civilisation, was a Bronze Age civilisation in the northwestern regions of South Asia, lasting from 3300 BCE to 1300 BCE.
- The Indus civilisation is also known as the Harappan Civilisation, after Harappa (now in Punjab), which is the first of its sites to be excavated early in the 20th century.
- Together with ancient Egypt and Mesopotamia, it was one of three early civilisations of the Near East and South Asia, and the most widespread (among the three).
- Its sites stretch over an area spanning from today's northeast Afghanistan, through much of Pakistan and into western and northwestern India.

#### **Dholavira**

- The IVC site is located near present-day Dholavira village in Kutch district, Gujarat, from which it gets its name.
- It was discovered in 1968 by archaeologist Jagat Pati Joshi. Later excavation at the site shows that it was a commercial and manufacturing hub for about 1,500 years before its decline in 1500 BC.
- Some of the archaeological findings at the site: Cascading series of water reservoirs, two multi-purpose grounds one of which was used for festivities and as a marketplace etc.
- The origin of the Buddhist Stupas can be found in memorials in Dholavira in the form of hemispherical structures.

#### Distinct features of the site

- Fifth largest metropolis: After Mohen-jo-Daro, Ganweriwala and Harappa in Pakistan and Rakhigarhi in Haryana of India, Dholavira is the fifth largest metropolis of IVC.
- Only IVC site to be divided in 3 parts: The site has a fortified citadel, a middle town and a lower town with walls made of sandstone or limestone instead of mud bricks in many other Harappan sites.
- A new dimension to the personality of the Harappans: Unlike graves at other IVC sites, no mortal remains of humans have been discovered at Dholavira.

(NOTE: KINDLY FOLLOW WEEKLY UPDATES TOO ALONG THIS MAGAZINE)